HANDBOOK

OF

THE RIVER PLATE;

COMPRISING

BUENOS AYRES, THE UPPER PROVINCES, BANDA ORIENTAL, AND PARAGUAY.

BY

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Editors of the Standard.

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VOL. I.

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TO

HIS EXCELLENCY D. F. SARMIENTO,

PRESIDENT OF THE ARGENTINE REPUBLIC,

THIS WORK

IS RESPECTFULLY DEDICATED,

BY

THE AUTHORS.

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ERRATA.

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"	"	16,	" 2,	" *Pyrenees.*
"	"	109,	" 15,	" 100 *tons monthly.*
"	"	157,	" 25,	" *Doubloon*, 15.36.
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SECTION A.

CHAP. I.

THE RIVER PLATE REPUBLICS.

THE RIVER PLATE REPUBLICS are three in number, viz.: the Argentine Nation (or La Plata, properly so called), Uruguay or Banda Oriental, and Paraguay. These immense territories, formerly comprehended in the vice-royalty of Buenos Ayres under the Spanish regime, cover nearly 900,000 square miles, with a scanty population not exceeding three millions, or *three* inhabitants per square mile. The mineral and agricultural resources of these countries are perhaps equal to those of the United States, and the water system is almost unrivalled, the affluents of the Plate ramifying one-half of the Continent. The climate is the healthiest on the face of the globe, the inhabitants are very friendly to foreigners, civil and religious liberty prevail in the fullest sense, and treaties of amity and commerce have been concluded with all the great Powers. Trade relations and new enterprises of importance have brought the River Plate into close contact with Great Britain and the London capitalists, and there are few countries which offer more inducements to English emigrants than these, or few foreign nations viewed with more respect, by Argentines, than Great Britain.

The ARGENTINE REPUBLIC is for the most part an unbroken plain, bounded on the North by Bolivia, on the West by the Cordillera of the Andes, on the South by Magellan's Straits, and on the East by Brazil, Banda Oriental, and the Atlantic. It is divided into fourteen provinces, some of which are little deserving of note, but others have attained a high degree of civilization.

The Province of Buenos Ayres is nearly equal to all the rest collectively, in importance, wealth, and population, being moreover the great centre of foreign immigration. The city of the same name is the seat of the National and Provincial Governments, and one of the principal sea-ports of South America. In the refinement of its society, progressive spirit of the people, and activity of trade and industry, it yields to no other city in the Continent, and has earned the title of «Athens of South America.» Entre Rios and Santa Fé have of late attracted much notice as sheep-farming countries. Cordoba, the heart of the interior, will soon receive a great impulse from the Central Argentine Railway. San Juan and Catamarca are remarkable for their mineral wealth. Mendoza, at the foot of the Cordillera, formerly the chief city of the Cuyo provinces, is hardly emerging from the ruins of the earthquake of 1861. Santiago and the other northern provinces have been hitherto so isolated as to be almost valueless, but the projected navigation of the Vermejo, and the opening of a highway through the Gran Chaco, will unite them with the river Paraná, the great artery of the Republic. The provinces called Litoral, from being adjacent to this river, have an immense advantage over the rest, possessing cheap freight and easy transit to Buenos Ayres and the commercial world. The population of the Republic is usually set down at a million and a half souls, but is rather over than under that estimate. The established religion is Roman Catholic, and the language Spanish, from which nation the original settlers were descended.

The Republic of Uruguay, or «Banda Oriental,» is separated from the last-mentioned country by the Rivers Plate and Uruguay: the La Plata, opposite Buenos Ayres, is twenty-eight miles wide. It is very different from the sister state, in being intersected with numerous chains of mountains, called here Cuchillas or Sierras. Its extent is 63,000 square miles, or larger than England by one-eighth. Many of the general features are similar to those of La Plata, the country being eminently adapted for sheep and cattle farming, and, moreover, free from Indian incursions. The capital, Montevideo, is favorably situated near the mouth of the Plate, and its commerce is almost equal to that of Buenos Ayres, from which port it is distant 120 miles. The next towns of importance are—Salto and Paysandú, on the River Uruguay; Canelones, Tacuarembó, and Minas, in the interior; Mercedes, on the Rio Negro; Colonia, abreast of Buenos Ayres; and Maldonado, on the Atlantic. The country is thickly wooded in parts, and presents a beautifully diversified appearance. Of late years there has been an immense influx of immigrants, and several Buenos Ayrean land-owners also possess estancias on this side: the population was

quintupled in the forty years from 1824-64, being now returned as 300,00 The live stock is considerable, amounting to 8,000,000 head of horne cattle, 14,000,000 sheep, and 2,000,000 of other kinds. The Custon regulations are much more liberal than those of Buenos Ayres; the religio and language are the same. During the past two years the country w desolated by civil war, but everything now seems satisfactorily settled, an the Government is really anxious to improve the means of internal transit develop the riches of the Republic, and foster foreign immigration.

PARAGUAY is not always counted one of the River Plate Republics, bein over a thousand miles inland, but we have included it because formerly part of the vice-royalty, besides being situated on the principal affluent o La Plata, and so intimately connected with Buenos Ayres. It is the countr least known of this Continent, and yet had made great advancement in the years just preceding the present war. Up to 1840 it was entirely closed against foreigners, under the rule of the sanguinary tyrant, D. Gaspar Francia. Railways, telegraphs, arsenal, dry docks, and other splendid works sprung up of late, employing a large and efficient staff of English mechanics. The Republic covers about 70,000 square miles, but claims a much larger territory, the frontiers with Brazil, Bolivia, and La Plata not being yet clearly defined. The census of 1857 gives a population of 1,337,449. The climate is warm, the country hilly and picturesque, and the soil fertile. The inhabitants are the most industrious in South America, the amount of land under cereals, cotton, and tobacco amounting to half a million of acres. The chief product of the country is yerba-mate or Paraguay tea, which, in time of peace, is annually exported (mostly to Buenos Ayres) to the value of £200,000. The cultivation of cotton was begun in 1863, but interrupted by the war. The capital, Asuncion, is a town of 25,000 inhabitants, formerly in weekly communication by steamer with the River Plate; it has some fine buildings, but is much behind Buenos Ayres and Montevideo. Villa Rica is the most important town in the interior, and those next in order are situated on the river Paraguay. The language of the country is Guarani, most of the people being descended from that race of Indians by inter-marriage with the Spanish settlers. As yet few foreigners have settled in Paraguay, but the natives are very kind and affable, and the police organization is perfect. The unhappy war which broke out in the beginning of 1865 has been ruinous to Paraguay, but earned for the natives a high reputation for valor.

CHAP. II.

THE ARGENTINE REPUBLIC.

is Republic holds the second rank among South American nations, coming st after the Empire of Brazil in extent and importance, though comatively low in the scale of population and native industry. There is, obably, no country on the face of the earth so favored by Nature: ing entirely situated in the South temperate zone, it enjoys a delightful imate, and the soil is so varied and fertile that it produces almost sponneously all the great staples of home consumption and foreign commerce. otton, wheat, tobacco, yerba-mate, cochineal, wine, coffee, silk, sugar, ool, and fruits of every kind may be raised of a superior quality, and n such abundance as to supply less favored nations. The mineral resources f the country are hardly less important: copper, silver, lead, salt, marble, ime-stone, granite, and coal are found in various places, and only require roper management and improved means of transit to become sources of ational wealth. The country is, moreover, magnificently wooded and atered: the Gran Chaco possesses more timber, suitable for every urpose, than the whole of Europe, and the number and extent of navigable ivers are quite equal to the natural greatness and future requirements of Republic destined one day to rival the Colossus of North America.

There is, unhappily, a sad contrast between what La Plata might be, and what it actually is. It does not export one bale of cotton; its tobacco is unknown; rice is a foreign commodity; yerba-mate from Brazil excludes that from Corrientes; cochineal abounds in Oran, but is not worth the freight; Mendoza wine has no market for the same reason; coffee is considered too troublesome; the spiders of Corrientes weave a fine silk, which no one thinks of gathering; sugar is hardly cultivated; fruits are unprized, and our export returns show but three great staples in the Republic—wool, hides, and tallow.

THE FOURTEEN PROVINCES.

The Republic comprises fourteen provinces, besides the Gran Chaco, following table gives their names, extent and population :—

	Square Miles.	Inhabitants.
Buenos Ayres, ...	70,000	500,000
Entre Rios, ...	50,000	115,000
Corrientes, ...	60,000	110,000
Santa Fé, ...	20,000	50,000
Cordoba, ...	60,000	150,000
Santiago del Estero, ...	35,000	115,000
Tucuman, ...	28,000	98,000
Salta, ...	50,000	101,000
Jujuy, ...	30,000	42,000
Catamarca, ...	35,000	105,000
Rioja, ...	35,000	43,000
San Juan, ...	33,000	75,000
Mendoza, ...	65,000	62,000
San Luis, ...	20,000	58,000
Gran Chaco, ...	250,000	40,000
Pampas and Patagonia, ...	440,000	46,000
Total, ...	1,281,000	1,710,000

The chief towns are :—

Buenos Ayres, ...	River Plate,	....	200,000
Cordoba, ...	31.25 S. lat.,	....	25,000
Rosario, ...	River Paraná,	....	20,000
Corrientes, ...	do.,	....	13,000
Tucuman, ...	27.10 S. lat.,	....	12,000
Salta, ...	24.57,	....	11,000
San Juan, ...	Rio San Juan,	....	12,000

The capital of each province (except Entre Rios) bears the same nam but the above are the only places worthy of note, and the rest have rath retrograded than improved, of late years, owing to the incessant civil wa and want of immigration.

The form of government is very complicated and unwieldy, but shape after the model of the United States. The National Executive is compose of—President, Domingo F. Sarmiento; Vice-President, Adolfo Alsina Home Minister, Dr. Dalmacio Velez Sarsfield; Foreign Affairs, Dr. Marian Varela; Finance, D. Benjamin Gorostiaga; Instruction, Dr. Nicola Avellaneda; War, Colonel Gainza. The seat of government is Buene Ayres, where Congress also assembles: there are two Chambers, th

Senators and the Deputies, elected in ratio by the various provinces. Each province has also its own Governor and Legislature, almost independent of the Supreme National authorities, and following no uniform rule. Buenos Ayres has two Provincial Chambers sitting within a stone's throw of the National Parliament; the other provinces have but one. In Cordoba the Governor has three Ministers, in other places there are two, but several provinces boast only one; and each Province has a separate Constitution.

The religion is Roman Catholic. There are about 10,000 Protestants among the foreign community, attached to the English, Scotch, American, and German congregations.

Spanish is spoken throughout the Republic, but Guarani is much in use at Corrientes, Quichua at Santiago, and French and English are becoming very general in Buenos Ayres.

The military service of the Republic is performed by troops of the Line and National Guards or militia. The first consist of ten regiments of infantry, nine of cavalry, and two of artillery, numbering 6,650 men, and they are employed in the defence of the frontiers against the Indians. In the Province of Buenos Ayres, which has a very extensive frontier of 130 leagues, there are three principal cantonments—the town of Azul, south; the Veinte y Cinco de Mayo, west; and Rojas, north. These little towns carry on a brisk trade from the consumption of the troops, and the barter trade with the friendly Indians.

Before the outbreak of the Paraguayan war the troops of the Line were distributed as follows:—

CAVALRY.

Regiment.		Station.		Strength.
1st,	....	Mendoza,	....	450
2nd,	....	Fraile Muerto,	....	250
3rd,	....	Rojas,	....	250
4th,	....	San Luis,	....	250
5th,	....	25 de Mayo,	....	200
6th,	....	Santa Fé,	....	200
7th,	....	Rio Cuarto,	....	450
6th,	....	Cordoba,	....	150
6th,	....	Melincue,	....	150
8th,	....	Azul,	....	100
Total,	....	....	....	2,450

INFANTRY.

Regiment.	Station.	Strength.
1st,	Buenos Ayres,	350
2nd,	do.,	350
3rd,	Azul,	350
4th,	25 de Mayo,	350
5th,	Tandil,	350
6th,	Rioja,	400
7th,	Buenos Ayres,	350
8th,	Salta,	350
Italian Legion,	Buenos Ayres,	400
Italian Legion,	Azul,	200
Total,		3,450

ARTILLERY.

Martin Garcia,		400
Mendoza,		250
Frayle Muerto,		100
San Juan,	Rifles,	
Total,		750

RESUMEN.

In the Provinces,	3,100
In Buenos Ayres,	3,550
Total,	6,650

The National Guard is composed of citizens who are regularly drafted from the country districts, and they guard the intervening redoubts or forts; their term of service is six months, and they are allowed during that period the pay of soldiers in campaign, *i.e.*, $230 per month. No National Guards from the capital are ever drafted for this service, for they are not always presumed to be, like the country people in the province, first-class horsemen, a necessary qualification for Indian warfare. The National army is composed of the following officers:—7 Brigadier-Generals (the highest rank obtainable in the country), 25 Generals, 217 Commanding-officers, and 605 subordinate officers—total, 854; which is rather more than a due proportion for only 6,650 men.

The National Guards on frontier service last year numbered 1,870 men, and, besides, there were 387 friendly Indians in Government service. The friendship of these Indians is of course exceedingly doubtful; they often steal cattle from the neighboring estancias.

By law, every citizen of the Republic is a National Guard, and liable, under certain circumstances, to be called into active service. The number is as follows:—

Buenos Ayres,	....	....	....	40,165
Entre Rios,	....	....	....	19,314
Corrientes,	....	....	....	9,349
San Luis,	....	....	....	5,404
Santiago,	....	....	....	19,514
Jujuy, ...	....	....	....	2,851
Mendoza,	....	....	....	5,708
San Juan,	....	....	....	6,900
Tucuman,	....	....	....	14,450
Salta, ...	....	....	....	15,091
Cordoba,	....	....	....	8,000
Catamarca,	....	....	....	3,786
Total,	....	....	....	150,622

The Provinces of Santa Fé and La Rioja are not included, in this official estimate, they are supposed to give—the first 6,000 and the second 3,000 men, thus making a grand total of 159,622, which is rather under than over the mark. But although presenting a respectable array in number, they are not nearly as powerful or effective as they should be, under proper organization.

The National debt (including that of Buenos Ayres) is about £12,000,000 sterling, the interest of which is regularly attended to, taking a-fifth of the total revenue. The revenue and expenditure for 1869 will not be under $14,000,000s., which, for our population, averages $8 per head, or three times the average of Chili, and our War-office costs over $3,000,000 or $5 per head. Let us compare this with the revenue and population of the various states of Europe, from the official Almanac of the United States.

	Population.	Revenue.	Average per Head.
Great Britain,	29,500,000	$322,000,000	$10.95
France, ...	37,500,000	413,000,000	11.00
Russia, ...	67,000,000	231,000,000	3.40
Austria, ...	35,000,000	171,000,000	4.88
Prussia, ...	18,500,000	96,000,000	5.32
Belgium, ...	4,750,000	26,000,000	5.40
Denmark, ...	2,750,000	11,000,000	4.00
Italy, ...	22,500,000	155,000,000	6.95
Holland, ...	3,500,000	33,000,000	9.40
Portugal, ...	4,000,000	15,000,000	3.75
Sweden and Norway,	5,250,000	14,000,000	2.65
Switzerland,	2,500,000	3,000,000	1.20
Spain, ...	16,500,000	97,000,000	5.88
Turkey, ...	16,500,000	65,000,000	3.95
General total,	265,750,000	$1,652,000,000	$5.20

For the financial year ending 31st March, 1868, the increase was in round numbers $2,470,000 s., or 26 per cent. on the previous year.

The total expenditure—including 6,500,000 for the Paraguayan war, 1,500,000 for the Interior riots, and 500,000 for amortisation of the public debt—amounted to $13,920,164. The total income was slightly over $12,000,000. Thus, it will be seen that were it not for the Paraguayan war, the Government would be in possession of a splendid surplus.

The National Bonds in circulation amount to 15,364,800, of which amount 5,000,000 are held by the Provincial Bank.

With the trifling exception of a direct tax collected in the city of Buenos Ayres, amounting to about $200,000s., the whole revenue of the National Government is raised by indirect taxation, more than nine-tenths of which are Customs duties, import and export, the proportion being about seven-and-a-half-tenths in import duties, and two-tenths export duties; the small balance is derived from stamps, post-office, and miscellaneous taxes.

In round numbers the four principal provinces of the Confederation contribute to the Customs revenue in the following proportions:—Buenos Ayres, 70; Santa Fé, 10; Corrientes, 5; Entre Rios, 5; the remaining ten being the quota of the other provinces.

The increase in the Customs receipts in Buenos Ayres has been much less in proportion than that of the Provinces of Santa Fé and Corrientes,

a proof that the direct trade with these provinces is augmenting. Taking the revenue in round numbers at 14,000,000, one-half is expended in military purposes. The Ministry of Finance consumes rather less than one-tenth; a large part is expended in collecting the Custom's revenues. As there is only one port of importance this expense is relatively not greater than in other countries, probably not more than 5 per cent. of the revenue collected. Justice, Public Worship, and Education require only one-twelfth, as each separate province has its own administration in these respects. Foreign Affairs and Legations consume only an eightieth part of the revenue. The Ministry of the Interior consumes an eighth of the whole. Of this amount the National Congress and Public Credit figure for more than a third. Finally the interest on the National Debt takes one-fifth of the revenue.

The increase of trade in late years has been unprecedented, as may be seen from the returns of National revenue.

1863,	....	....	....	$6,478,682
1864,	....	....	....	7,005,328
1865,	....	....	....	8,205,071
1866,	....	....	....	9,568,554

The value of imports and exports was, in 1862, $45,890,282; and in 1866, $66,358,551.

The import and export trade returns with Great Britain in 1866 shewed an increase of 26 per cent. over the previous year; those with France 11 per cent.; with Brazil 45 per cent.; with Spain 11 per cent. The only falling off was in imports from the United States and Holland: the trade in American flour has entirely ceased, owing to the cultivation of wheat in the last few years.

Value of Imports,	....	1865	....	27,103,017
Do.,	....	1866	....	32,269,082

Of imports, we get one-third from England, one-fourth from France, one-eighth from Brazil, and the rest from Spain, United States, Montevideo, and Italy.

The value of the imports in 1866 from England alone amounted to $10,240,210s., being an excess of 2,234,000 over the imports of the previous year, and more than double those of 1862.

The export returns for 1866 shew an increase of nearly 5 per cent. on the previous year, viz.:—

Value of exports,	....	1865	....	21,996,777
Do.,	....	1866	....	23,029,711

Of exports, Belgium takes one-third, France one-fourth, United States one-fifth, England one-eighth, and Spain, Italy, and Brazil the rest.

The gross returns of 1866 compared with 1862, show an increase of 50 per cent. in our commerce, but that with England was nearly doubled in the interval.

The greatest increase in our exports is in wool—

1862	....	....	....	58,153,575
1863	....	....	....	73,502,425
1864	....	....	....	87,076,776
1865	....	....	....	115,852,430
1866	....	....	....	110,404,970

This includes a small proportion (5 per cent.) of washed wool.

The shipping returns shew that 1,036 sailing vessels, representing 267,213 tons, arrived here from foreign ports during 1866, being an increase of 374 vessels over the returns for 1862. The number of steam-boat arrivals for 1866 is put down at 487; but this does not include the smaller ones of passenger traffic.

Immigration from Europe, up to 1862, averaged 5,000; it now exceeds 25,000 per annum—mostly Italians, French, English, and Spaniards; of these, two-thirds are able-bodied men of the laboring classes, with a sprinkling of women and children, and 10 per cent. educated persons.

There are six railways in the Republic, with 350 miles open to traffic, 190 in construction, and seven other lines projected.

The business of the Buenos Ayres Post-office has increased enormously of late years: the number of letters and papers passing through the office in 1859 was 400,000, in 1862 it rose to 800,000, and in 1865 it amounted to 2,000,000! This last was an increase of 33 per cent. on the previous year.

The population of the city and province of Buenos Ayres in 1801 was set down at 72,000, in 1855 at 271,000 and at present it must be nearly double the last figure. Within the last three years no fewer than 3,550 houses have been built or re-built in the city: in the same period we have to note a similar activity in every branch of industry and progress.

The farming-stock of the Republic is set down, according to statistics of 1866, as follows:—

PROVINCES.	HORNED CATTLE.	HORSES.	ASSES & MULES.	SHEEP.	GOATS.	SWINE.
B. Ayres	6,000,000	1,800,000	30,000	60,000,000	5,000	115,000
Entre Rios ..	2,500,000	600,000	7,500	6,000,000	....	....
Corrientes ..	2,000,000	375,000	60,000	1,000,000	10,000	4,500
Catamarca ..	185,000	40,000	40,000	80,000	121,000	2,500
Mendoza	210,000	71,000	7,500	230,000	70,000	8,500
Salta	255,000	50,000	50,000	150,000	95,000	2,500
San Luis	300,000	96,000	14,000	160,000	285,000	....
Tucuman	275,000	85,000	22,000	95,000	25,000	....
Cordoba, San Juan, Jujuy, Rioja, Santa Fé, Santiago, no returns.	....	....	....	....	....	....

It may give an idea of the industrial condition of the Republic, to submit a list of the articles forwarded to the Paris Exhibition, and the names of those who gained prizes.

The Central Committee of Buenos Ayres forwarded seventy-four boxes, containing numerous interesting specimens.

Cordoba sent a collection of minerals and samples of marble.

Jujuy sent a variety of valuable woods, manufactured articles, cereals, brandy, indigo, &c.

Tucuman exhibited forty kinds of timber, and various works of handicraft such as tanned hides, plaited reins, an «apero» or native saddle tastefully ornamented, a lady's handkerchief, of lace equal to the finest Valenciennes, and a lot of medicinal roots.

Mendoza came next after Buenos Ayres in the variety of its collection, comprising silver ore, marble, beautiful crystals, honey, wax, preserved fruits, Cayano wines and liqueurs grown by Messrs. Ponget, Civit, and others, guanaco and silk ponchos, swan's down, ostrich feathers, Alpaca and Vicuña skins, and a pillar of green transparent marble, streaked with red.

Buenos Ayres, of course, occupied the foremost rank—

Messrs. John Hannah, Wilfrid Latham, Martinez de Hoz, Richard Newton, and Pacheco, contributed samples of superior wools. Preserved and salted beef figured largely, especially that of Mr. Oliden, who obtained a gold medal at the London Exhibition of 1862. Mr. Bletcher sent hides tanned and varnished, morocco leather, &c., of beautiful finish and superior quality. Mr. Klappenback's collection of silver and other ores from San

Juan was admirable. Mr Holterhof sent candles from the Barracas factory. Mr. Younger sent some sheepskins from his steam «lavadero.» M. Rouqueaud exhibited calf's foot oil, and other articles, from his establishment. Messrs. Huergo and Durand had a fine sample of native silk. The Rural Association contributed cereals grown at Chivilcoy and Mercedes.

The files of the *Tribuna* and *Standard* represented the press of Buenos Ayres.

The prizes were as follows:—

GOLD MEDAL.

Argentine Government, for gold, silver, and copper ores.

SILVER MEDALS.

Mr. Lafone, copper samples.
Bletscher and Co., hides tanned with quebracho.
John Hannah, wool.
Bethe and Hubler, extractum carnis.

BRONZE MEDALS.

Roquet Brothers, silver ores.
Klappenback, silver ores.
The Government, samples of timber.
Stegman Brothers, wool.
Richard Newton, wool.
Wilfrid Latham, wool.
M. Duportal, wool.
Martinez de Hoz, wool.
Macedonio Gras, Alpaca wool.
M. Rouqueaud, calf's foot oil.
The Secretary of Committee, soap.
Tucuman Provincial Company, medicinal herbs.
Thomas Oliden, dried and salted beef.
The Government, for «popular customs» (stuffed gauchos, &c.)

HONORABLE MENTION.

Tucuman Provincial Company, embroidery.
Major Rickard, silver ores.
Carranza, mineral specimens.
General Pacheco, wool and tobacco.
H. Solanet, wool.
Francis Younger, wool.
William Müller, dried beef.
Demaria and Ariza, dried beef.
Ponget, of Mendoza, white wines.
Michel Ponget, white wines.

CHAP. III.

FOREIGN POPULATION.

The number of foreigners in this country is very great, and every day increasing. The chief centres of European immigration are Buenos Ayres, Santa Fé, Entre Rios, Corrientes, Cordoba, and San Juan.

The foreign population of the Province of Buenos Ayres is estimated at 250,000, distributed as follows:—

Italians,	....	70,000	Irish,	....	30,000
Basques,	....	40,000	English and Scotch,		10,000
French,	....	30,000	Germans,	....	10,000
Spaniards,	....	30,000	Other nationalities,		30,000

This large number of foreigners, forming half the population of the Province of Buenos Ayres, is remarkable: and the foreigner, upon landing, is agreeably astonished to find himself in the midst of a large society of countrymen. Amongst Argentines of the respectable classes, proficiency in foreign languages is considered a necessary qualification; thus, the greater part of the merchants speak English or French.

The English, unquestionably, occupy the foremost place in Buenos Ayres, although their number is relatively so small. Of course, in speaking of English merchants, this is also taken to include Scotch, and a few Irish and North Americans; this community embraces the greatest element of social and commercial importance in Buenos Ayres. A vast amount of the import and export trade passes through their hands, and the commercial interests may be said to be identified with their names.

Englishmen are rarely found here in other than mercantile pursuits; they are the leading merchants, brokers, bankers, shipping agents, &c., but are seldom or never found as sheepfarmers, mechanics, or in humbler positions. They usually make handsome fortunes, live in good style, and get along pleasantly with their fellow-foreigners and townsmen. In another chapter we shall make allusion to the number of British institutions in the city.

The Germans come next after the English in importance and position, being more varied in their callings, and representing much less of the staple trade of the country. There are several first-class German houses in the city, besides a number of «barraqueros,» brewers, shopkeepers, clerks, and tradesmen. As a rule, they are all well educated, and very apt for business, usually possessing three or four languages fluently. Under the title «Germans» are generally included also Swedes, Danes, Dutch, and Belgians. In some of the country towns of the Upper Provinces we find an occasional German shopkeeper, in Cordoba there are sundry goat-breeders, in the Province of Buenos Ayres a few are estancieros, and the colonies of Baradero and Santa Fé are in part made up of Germans.

The French prefer the city to the country, and have a monopoly of fancy bazaars and such like; the only merchants are those in the wine trade with Bordeaux or Cette; there is a number of hotel-keepers, tailors, milliners, hair-dressers, and mechanics. In the little towns the French are very numerous, and they are generally industrious and enterprising: they assimilate more with the people of the country than either Germans or English. Many of the charitable institutions are in charge of the French Sisters of Charity. Throughout the Upper Provinces there is a large sprinkling of French, usually innkeepers, mechanics, or small tradesmen.

The Irish, although exercising little or no weight in public matters, may contend with any other nationality in point of usefulness. They have not, it is true, the position or advantages of their mercantile brethren, nor the versatility of the Basques in accommodating themselves to any calling or occupation; but to them is due the grand development of sheepfarming, which makes this country rival Australia in the growth of wool. The Irish farmers are estimated to possess nearly 30,000,000 sheep: they are also, as farmers, the chief landed proprietors in Buenos Ayres, and very hospitable to strangers. The districts of Lujan, Mercedes, Pilar, Areco, Lobos, &c., are thickly settled with Irishmen, and each district has its own Irish clergyman. With one or two exceptions, the Irish settlers began life (within the last thirty years) having no other capital than a spade or shovel. There is nothing in the country more admirable than the steady industry of these men, some of whom count their sheep by the hundred-thousand, and have landed property of thousands of acres in extent. In the city there is a large number of Irish housemaids, who are remarkable for their uniform morality, honesty, and good conduct.

The Basques are highly valued as immigrants: they come from either side of the Pyrenees, and may be classified into French Basques and Spanish Basques, both having almost the same language and national character. They are hardy, honest, and laborious, and are found in every occupation of the middle or humbler classes. After the Italians, they form the largest foreign population. As brick-makers, milkmen, shepherds, saladero peons, &c., they constitute a most useful class, and their good conduct is quite proverbial. Many of them have risen in the social scale, and some large fortunes and valuable enterprises are held by Basques.

The Spaniards are with difficulty distinguished from the natives. They come mostly from Andalusia, Catalonia, and Galicia. The Catalans are wine merchants and first-rate business men. The Andalusians are cigar sellers and shop-keepers. The Galicians are street porters, night watchmen, newspaper messengers, and domestic servants: they are sober and honest, but not very enterprising.

The Italians are the most numerous class of all, and may be found in every occupation of city life, and also scattered through every part of the vast territory. Finding here a similarity of language and climate to their own, the Italians make the River Plate their favored place of colonization. As masons and builders they are specially useful, and the various splendid piles of building raised within the last ten years have given them an active business. In the humbler calling of market-gardeners they also supply the city with vegetables and earn a profitable livelihood.

The monopoly of the river navigation and coasting crafts is in the hands of Genoese; the crew are generally equal sharers in the venture, and appoint a «patron» or captain to command, and trade on their own account, purchasing cheese, birds, skins, fruit, &c. in the upper markets, to bring to Buenos Ayres or Montevideo. They construct their own ships in the suburb of the Boca, where they have formed a rapidly rising town of about 5,000 inhabitants.

In the Upper Provinces the number of foreign settlers is very small; still there are a few scattered here and there, viz.:—

In Salta, chiefly Bolivians; who come there for the purposes of trade, and on account of the political convulsions of their own republic: similitude of origin, climate, soil, and productions, as well as the

proximity to their own frontiers, accounts for their preference of this province. The Colony of Esquina Grande, situated at the head waters of the Vermejo, is almost exclusively composed of natives of Bolivia.

In Mendoza and San Juan, there are not many Europeans, but a considerable number of Chilians, who are engaged principally in the mines.

In Cordoba there are about a thousand foreigners, chiefly French, Germans, Italians, and Spaniards, and a few English; their occupation is in the mines, flour mills, lime kilns, and as mechanics and goat-breeders.

In Entre Rios and Corrientes there is a large number of foreigners. Many of them are wealthy, and their occupations are so varied, that they are to be found in every branch of industry and trade. In Entre Rios there is a number of English estancieros. The Province of Santa Fé has three thriving colonies, that of Entre Rios two, and that of Buenos Ayres one.

The Committee of Immigration have agents in various parts of Europe, viz.:—

Mr. Beck Bernard, Berne; for Switzerland and Germany.
Mr. John Lelong, Paris; for France.
Mr. Lloyd, of Messrs. Wright, Kelso, & Co., Liverpool.
Mr. Hadfield, and Messrs. T. M. Mackay & Son, London.
Mr. Perkins, Montreal, Canada.

The Committee have a Home for Emigrants at No. 8 Calle Corrientes, where they get food and lodging gratis till they find employment.

Free immigration is the rule: neither the Government nor the Committee assist in paying passages from Europe.

The current of emigration from Europe is rapidly increasing, as we see by the returns, as follows:—

1858,	....	4,658	1863,	....	10,400
1859,	....	4,715	1864,	....	11,680
1860,	....	5,656	1865,	....	11,770
1861,	....	6,300	1866,	....	13,960
1862,	....	6,716	1867,	....	23,500

The relative proportion of the various nationalities in 1867 was—Italians, 38 per cent.; French, 13; Spaniards, 9; English, 6; Swiss, 4; Germans, 3; other nationalities, 27 per cent.

The number of vessels and passengers from foreign parts in 1867 is given as follows:—

		Vessels.		Passengers.
Genoa,	....	61	....	8,314
Bordeaux,	....	55	....	2,409
Bayonne,	....	13	....	1,800
Havre,	....	25	....	627
Marsei ,	....	30	....	1,156
Vigo,	....	3	....	500
Coruna,	....	5	....	563
Barcelona,	....	33	....	174
Tarragona,	....	6	....	45
Cadiz,	....	24	....	1,302
Liverpool,	....	64	....	815
Glasgow,	....	18	....	74
London,	....	6	....	25
Southampton,	....	12	....	150
Antwerp,	....	17	....	1,688
Hamburg,	....	68	....	227
Bremen,	....	2	....	31
Transhipped at Montevideo			....	3,600
			....	
Total	....	441	....	23,500

In the report of the Immigration Committee the following scale of wages is given, and the figures are not exaggerated:—

Farm servants,	Monthly, with Board,		£3 5s.
Gardeners, ...	do.,	do.,	£4 to £5
House Servants,	do.,	do.,	£2 10s. to £3
Cooks, ...	do.,	do.,	£3 to £4
Needle-women,	do.,	do.,	£3
Milliners, ...	do.,	do.,	£3 to £4
Laundresses,....	do.,	do.,	£3
Brick-layers,....	Daily, without Board,		6s. 6d.
Carpenters, ...	do.,	do.,	7s. 6d.
Blacksmiths,....	do.,	do.,	7s. 6d.
Tailors, ...	do.,	do.,	6s. to 10s.
Shoemakers,....	do.,	do.,	7s. 6d.
Railway navvies,	do.,	do.,	8s.
Saladero peons,	do.,	do.,	12s. to £1 4s.

The cost of a mechanic's board and lodging does not exceed three shillings a day. Workmen of all kinds find immediate employment, and the new railways will require thousands of navvies. Any number of farm-laborers, married or unmarried, will find plenty of work on the estancias of Buenos Ayres. Domestic servants are much wanted in town, and women are preferred.

Nothing can better shew the prosperity of immigrants than the official return of depositors in the State Bank of Buenos Ayres. Of 100 depositors the various nationalities were thus represented :—

Italians,	....	30	French,	....	9
Argentines,	....	18	English and Irish,		4
Spaniards,	....	13	Germans,	....	4
Basques,	....	13	Various,	....	9

The proportion of moneys so lodged was distributed as follows—out of every 100,000,000 paper dollars deposited, the owners were :—

Argentines,	....	27,000,000	Basques,	....	9,000,000
Italians,	....	20,000,000	French,	....	8,000,000
English and Irish,		14,000,000	Germans,	....	6,000,000
Spaniards,	....	10,000,000	Various,	....	6,000,000

It must be borne in mind that besides the depositors in bank there are thousands of industrious Europeans who have invested their savings in land and farming stock. Many of the Irish settlers, as in North America, send home sums of money to their relatives, to support them or pay their passage hither. The Irish housemaids in town have also accounts in the Savings-banks.

The Italians, as a rule, practise the greatest economy, to accumulate a fortune of £500 or £1,000; and, this attained, they return to their native land. The French, on the contrary, as soon as they have made some money, start a mill or some such enterprise, and settle for good in the country.

CHAP. IV.

AGRICULTURAL COLONIES.

Besides the numberless foreign settlers established as sheepfarmers, or in other occupations, there are six agricultural colonies founded by capitalists or Provincial Governments, on given concessions of land. In Santa Fé there are three colonies, in Entre Rios two, and in Buenos Ayres one, viz. :—

SANTA FÉ.

Esperanza, ...	1627 colonists,	....	Eight Leagues from Santa Fé.
San Jeronimo,	800 do.,	....	Two Leagues from Esperanza.
San Carlos, ...	735 do.,	....	Two Leagues from S. Jeronimo.

Santa Fé is the province which has done most for colonisation, and its colonies are in a thriving way. The soil is fertile, watered by numerous rivers and «arroyos,» which abound in fish. The Governor of Santa Fé gives a free passage by steamer from Buenos Ayres to all mechanics or settlers bound for Rosario or Santa Fé city, or other part of the province. The port for the colonies is Santa Fé, which has weekly communication with Buenos Ayres, Montevideo, Corrientes, and the smaller ports.

The *Esperanza Colony*, founded by D. Aaron Castellanos in 1856: the first settlers were Germans, who brought with them a clergyman, a director, and a schoolmaster. In 1858 the Argentine Government took the colony under its protection, indemnifying Sr. Castellanos with £24,000 sterling. The first years were unfortunate, owing to the locusts; but the colony is now flourishing. It is composed of 355 families, counting 1,627 colonists, viz. :—

Swiss,	....	852	Belgians,	....	69
Germans,	....	456	Italians,	....	23
French,	....	207	Various,	....	20

In 1863 the colony had 85 births, 28 deaths, and 28 marriages.

There are in the colony a Catholic chapel, another for Protestants, two schools, and 474 dwelling-houses, each house having a well of excellent water. The number of farm-lots occupied is 210, each containing 85 acres English. There is a vast extent of ground in this colony as yet unallotted.

The yield for 1865 was as follows:—

Wheat, ...	5,895 fan. (350℔)	Vegetables, dried,	754 fan.
Indian corn,	12,370 do.	Butter, ...	653 cwt.
Barley, ...	240 do.	Cheese, ...	600 do.
Potatoes, ...	1,200 do.		

This produced, after deducting for home use, a market value of £30,000. The number of fruit-trees, mostly peaches, is put down at 100,000, and the vines have given such good results that new plantations are being made.

The stock, in 1865, comprised:—

Cows and oxen, ...	8,000	Pigs, ...	710
Horses and mules, ...	1,700	Poultry, ...	2,500
Sheep, ...	708	Beehives, ...	20

The colonists exported during the year, 55 brls. of flour, 545 cow-hides, and 625℔ of hair. The occupations we find thus distributed—19 groceries and draperies, 9 carpenter-shops, 6 brick-layers, 5 blacksmiths, 4 midwives, 4 bootmakers, 4 mills, 3 tailors, 2 inns, 3 brick-kilns, 1 baker, 1 doctor, 1 brewer, 2 steam mills, 2 windmills, 1 sawing, 6 reaping, 2 threshing, and 10 winnowing machines, 220 dairies.

The *San Jeronimo Colony* is two leagues from that of Esperanza, comprising 157 families, which count 753 colonists, settled on 181 farm-lots of 85 acres each. In the concession there is still a large tract of ground ready for any who may join the colony. The returns for 1865 were:—

Swiss, ...	644 colonists.	Italians, ...	10 colonists.
Germans.	67 do.	North Americans,	3 do.
French, ...	13 do.	Natives, ...	3 do.
Belgians, ...	13 do.		

Births 19, deaths 10, marriages 2.

The colony boasts a church, school, and 165 dwelling houses. There are 5 shops, 3 mills, 3 blacksmiths, 4 carpenters, 1 brewer, 1 butcher, 3 shoe-makers, 1 mason, 1 gunsmith—but most of these artisans devote their chief attention to agriculture. The number of fruit trees is put down at 30,000.

The crops for 1865 gave:—

Wheat, ...	2,000	fanegas.	Butter, ...	200	cwt.
Indian corn,	3,000	do.	Cheese, ...	200	do.
Oats, ...	10	do.	Poultry, ...	1,000	
Potatoes, ...	500	do.	Eggs, ...	815,000	
Vegetables,	48	do.			

The stock comprised:—

Cows or oxen, ...	3,000	Pigs, ...	331
Horses, ...	570	Hens and ducks, ...	2,150
Sheep, ...	14		

The *San Carlos Colony* is situate 8 leagues S.W. of Santa Fé, 6 south of Esperanza, and 5½ N.W. of Coronda; the last named is a port on a branch of the Parana. Only a small part of the concession (which comprises 330 lots) is yet taken up by settlers, but there are 130 farm-lots, of 85 acres, under cultivation. Every alternate lot belongs to the concessionaires, but they allow the use of same to the colonists for grazing purposes. There are 130 families, with 735 colonists:—

Swiss, ...	393	Germans, ...	10
Italians, ...	204	Natives, ...	24
French, ...	95		

Of these there were 266 men, 203 women, and 266 children. Births 35, deaths 4, marriages 8. The colony boasts a church, 3 schools, and 210 houses. There are 6 shops, 2 mills, 1 carpenter and 1 blacksmith. The industry of butter and cheese is rapidly increasing, the Swiss and French families occupying themselves therein.

The stock comprised—

Cows and oxen, ...	3,008	Horses, ...	786
Sheep, ...	26	Swine, ...	270
Hens, ...	3,000	Fruit trees, ...	83,753

The Santa Fé Government is always willing to extend the concession for any new settlers that may offer, and the alternate lots belonging to the concessionaires are sold at reasonable prices, the preference being given to the colonists. The colony has easy communication in all seasons with San Jeronimo, Esperanza, and the port of Coronda. Steam traffic is about to be established between Santa Fé and Coronda; but if the steamers would call at Maciel this would be only four and a half leagues from the colony.

The gross returns of produce sent into Santa Fé, in 1865, by the three colonies, were—

Wheat, ...	60,000 cwt.	Butter and cheese,	3,000 cwt.
Indian corn,	20,000 do.	Eggs, ...	200,000 doz.
Oats, ...	5,000 do.	Fowl, ...	not stated.
Vegetables,	7,000 do.		

The butter was valued at £8,000 sterling, the eggs at £12,000, and the cheese at an equally high figure. Meantime, the produce of the colonies increases every year in a wonderful manner, and the value of their lands has been enhanced fully 25 per cent. by the opening of the Rosario and Cordoba Railway.

Mr. Perkins, formerly editor of the *Ferro-Carril* of Rosario, published a valuable and interesting work in Spanish and English on this subject. At the invitation of Governor Cullen he started from Rosario, in November, 1863, to make a tour of the colonies, and his narrative bears the marks of truth. At Lake Guadalupe, close to Santa Fé, he visited the fish oil factory, where he estimates 5,000 barrels of oil may be produced annually, without seriously reducing the fish, which are sold at one real (6*d*.) per arroba (25℔). Here also is a small colony of wealthy Germans, who preferred purchasing this site to taking the free Government lands.

In company with M. Henri, Mr. Perkins set out for the Esperanza Colony, distant twenty miles from the capital of the province. This was the first of all the colonies, and established by D. Aaron Castellanos. The settlers were at first rather unfortunate, being mostly ignorant and indigent people; but patience and experience have aided them, and the colony is now flourishing. There are—says Mr. Perkins—345 families, making up a population of 756 Franco-Swiss and 805 Germans, of whom two-thirds are Roman Catholics, and one-third Protestants. The colony is a parallellogram of thirty-two square miles, divided into concessions of eighty acres each: the whole is bisected by a common for grazing, 400 yards broad and six miles long, the Germans being on one side, and the Franco-Swiss on the other. There are over 9,000 acres under crops, the amount sown being estimated as follows:—wheat, 3,150 bushels; barley, 250; Indian corn, 35,000; beans and peas, a little; potatoes, none. The stock comprises—1,569 horses, 396 oxen, 2,305 cows, 3,700 calves, 500 sheep, and 600 pigs. The plaza is well built, containing a Catholic chapel, and a Protestant one in construction, besides other edifices and three schools; but the latter are badly attended, the children being made to work.

Two American gentlemen named Evans and Shafter, lately settled in the colony, and brought reaping and threshing machines, and other American improvements, into general use: one of these machines can grain 200 quintals per day. The woods being fifteen miles off, few of the concessions are fenced in, and some are so with wire. There are one vineyard and several gardens. The crops for this year—(1863)—are valued at $115,000 s. Cheese, butter, eggs, fowls, and vegetables are raised; but the supply would be much greater if cheap transport could be procured. One family has an income of $400 s. from butter alone, which they sell at 6*d*. to 9*d*. per ℔, the same being worth 2*s*. in Rosario and 3*s*. in Buenos Ayres. The annual produce in eggs is 160,000 dozen. There are two wind-mills, and several water-mills. The people live simply but substantially, consuming little animal food. Every family has a two-horse four-wheeled waggon, and some have two or more. There is a trifling disagreement in the colony about mixed marriages. It is remarked that the Franco-Swiss have thrived better than the Germans.

The San Jeronimo Colony was founded so late as 1862, by a number of Swiss from the Canton of Valais, each of whom brought some money; from £200 to £800 sterling. They paid all their own expenses, and only received from Government the usual land grant of eighty acres per family. The colony covers 9,000 acres, occupied by eighty-five families, counting 462 souls: of these, one half are new arrivals, and have as yet no wheat crops. There are sown 284 bushels of wheat, and a good deal of barley. The people are sober and industrious, good Catholics, moral and respectful, and superior to those of Esperanza. They have already a fine church, built by subscription of 5,000 bricks each, and several good brick houses. Each family has about twenty cows and horses, but no sheep. They make excellent butter and cheese, the latter fetching $12 per cwt. The colonists pay the expenses of an agent, who goes backwards and forwards to Switzerland, bringing out new families for the colony. A man formerly working at the Esperanza as farm-servant, has settled here, and is now worth £1,000. San Jeronimo is half way between Esperanza and San Carlos, and Mr. Perkins gives it the preference of all.

The San Carlos Colony was founded in May 1859, by the commercial house of Messrs. Beck and Herzhog of Basle, assisted by a company, which purchased some of the shares and advanced the capital. The emigrants were of a lower order, like those of Esperanza, and all their expenses, maintenance, implements, stock, seeds, &c., were most liberally supplied and paid for by the company. Each family got a free passage, 160 acres

of land, horses, cows, &c., on condition of paying to the company every year (for five years) one-third of their crops, cultivating sixteen acres the first year, and so on. The half of each lot, *i.e.*, 40 acres, is set apart for grazing, and after the fifth year this remains the property of the company, the other half passing in fee to the settler. The colony covers thirty-seven square miles, or 26,000 acres, in 165 double lots, and is situate midway from Coronda to Santa Fé, and three leagues south of San Jeronimo. The population is 556 souls, in 100 families, of whom one-half are Protestants. All bear an excellent character, except two or three drunkards. In the year 1862 there were nine deaths and thirty-two births. The colony is most prosperous and healthful. A Swiss named Goetchi landed in 1859, owing the company $500, and he has now paid all, and is worth £1,000 sterling: others show similar good fortune, the sheer fruit of industry. The stock amounts to—2,531 horned cattle, 649 horses, 265 pigs. The company, on its own account, took up 800 sheep from Buenos Ayres in 1860, lost 200 after arrival, and still counted 1,600 in 1863. The wheat crop in 1863 yielded 37,000 bushels; the maize, barley, &c., is estimated at 8,000 quintals. There are public offices, church, model farm, gardens, and peach plantations.

Mr. Perkins advises the adoption of traction engines for transport, and estimates the aggregate annual produce of the colonies as follows:—Wheat, 56,000 cwt.; maize, 15,000; barley, 5,000; vegetables, 2,000; butter, 800 cwt.; eggs, 1,000 cwt.; cheese, 2,000; various, 5,000—total, 86,800 cwt.

Respecting the San Carlos colony, we have some interesting particulars in the report of M. Jacques Stelzer, Justice of the Peace:—

«Among the most comfortable families I may mention that of Sigel, with its handsome house on the right of the high-road. This family is of German origin, and arrived in 1859: it counts 7 persons, the youngest 12 years of age. Mr. Sigel is a laborious and intelligent man, assisted by his children, who are already able to guide the plough: from the beginning he has had good crops, especially that of 1866, when grain fetched 12 and even 16 dollars per «fanega.» In that year he was enabled to pay off all he owed to the Company, and has thus been free of the 18 per cent. which less fortunate colonists still have to pay. Moreover he wrought at his trade of wheelwright, which gives him a good revenue. The Sigel family now owns 94 horned cattle, 21 horses, and 50 hens, besides laying down this year 14 «almudes» of wheat, 50 acres of maize, and planting 5,000 fruit-trees. The Sigel concession is the best in the colony.

«The Taverna family, comprising Michael Taverna, his wife, and

4 little children, the eldest 12 and the youngest 14 months old, and a partner named John Bonetti. This family owes its prosperity to the experience of Taverna, the order and frugality of his wife, and the constant and careful labor of Bonetti: they arrived in 1859, and now possess a fine brick house, 40 head of horned cattle, 12 horses, 14 pigs, and 50 hens, besides a farm of 60 «almudes» of wheat, 45 acres of maize and vegetables, and 2,000 fruit-trees.

«The Haemmerly family, of Swiss origin, arrived in 1859; at first comprised Albert Haemmerly, his wife, three sons, and two daughters, all of an age to work: the wife died in 1862, and all the children have got married and purchased concessions for themselves, except the youngest son, who has remained with his father. Haemmerly has a neat house, 60 head of horned cattle, 20 horses, 4 pigs, 40 hens, besides cultivating 35 «almudes» of wheat, 25 acres of maize, and 3,000 fruit-trees.

«The Reuteman family, Swiss-Germans, is composed of 9 members, including 7 children from 2 to 18 years of age: the concession is surrounded with poplars, paradise, and some 4,000 fruit-trees. This family owns 84 head of horned cattle, 10 horses, 1 pig, and 100 poultry, besides a farm of 65 «almudes» of wheat and 45 acres of maize and vegetables.

«The Reale family, of Italian origin, counts 11 members, with a fine house and out-offices, 60 horned cattle, 12 horses, 13 pigs, 60 poultry, and a farm of 40 «almudes» of wheat and 80 acres of maize, but only a few fruit-trees.

«The Goetschy family, of Swiss origin, owns 83 horned cattle, 6 horses, 20 hens, and a farm of 48 «almudes» of wheat, with 2,000 fruit-trees, and a fence of poplars and paradise trees.

«These are the families specially deserving honorable mention in my official report, without prejudice to the many other honest and hard-working people in the Colony. I have mentioned those most remarkable for their fine appearance, good houses, and superior cultivation, hoping you will permit me at another time to specify other families in prosperous condition, in all which details you may rely on my adhering strictly to the facts.»

The success of these colonies soon stimulated the Santa Fé Government to offer concessions in various parts of the Province for similar settlements, and Governor Oroño, during his term of office, labored strenuously to foment immigration. Unfortunately, the Paraguayan war checked the formation of new colonies, and the projects have either lapsed, or still

remain 'in statu quo.' Sor. Oroño, while Deputy to Congress, in July, 1864, introduced a bill as follows:—

1st. To emit £400,000 in 6 per cent. Bonds, negociable at 75 per cent.

2nd. To bring out 1,000 families of the farming class from Europe, to supply them with provisions, animals, and farming implements, during one year; to build houses and a school for each colony.

3rd. Each immigrant family to comprise five individuals, and receive two oxen, one horse, three fanegas of wheat, two of potatoes, one of maize, two ploughs, and provisions for twelve months. Each family to get a grant of twenty-four cuadras (100 acres) of land for ever, and this as well as all produce to be free of taxes for twenty years.

4th. After four years the colonists to begin to re-imburse these expenses, paying to Government one-fifth of the amount until satisfied.

The project was thrown out by Congress, but about the same time the Santa Fé Legislature, made a grant of 200 square leagues to a German Company, which assumed the name of «The Argentine Land and Emigration Co., Limited,» and published the following prospectus:—

«The capital of the present company is £500,000, and the company is to secure the land grant made by Government, by sending out ten thousand families to form agricultural colonies within the period of ten years.

«The lands granted by Government to the concessionaires are to be situated on the Parana and Salado, their exact locality to be fixed by the company's surveyor.

«The Government agrees to convey, on the arrival of every 200 families, six square leagues.

«The colonists are to be Germans and Irishmen.

«The Government makes a free grant of 200 square leagues of land, of which 106¼ leagues are to be distributed among the immigrants, and the balance, 193¾ leagues, becomes the free property of the company.»

Nothing has since been heard of the company, but it is possible that on the conclusion of the war the project may be revived

In September 1866, a concession was given to Sor. Calvari for the introduction of a number of Italians to colonize the Gran Chaco. Sundry German and French enterprises of the same kind also sprung up, of which we shall speak more fully in treating of the Gran Chaco. There is at present a project to establish a colony at the Guardia Esquina, situate on the Rio Tercero: this river may be made navigable, and the colony will be within easy reach of the Rosario and Cordoba railway.

Another newly-projected colony, in the neighborhood of the town of San José, has received the name of «San José de la Esquina,» where eighty

acres of land will be given to any person, on the sole condition of its being cultivated, and of their bringing a couple of oxen, a pair of horses, and the necessary agricultural implements. An extra inducement to settlers is held out by a promise of four pounds of meat daily, to be given gratuitously to each family during the first year. The town of San José, near the banks of the Paraná, has about 100 inhabitants. The colonists must fence in their lots, make a well, and plant fifty trees: for five years they will be exempt from all taxes. The distribution of the lands will be made by the following committee:—Messrs. Aaron Castellanos, Pedro Ramayo, Colonel Rodriguez, Joaquin Lejarza, Santiago Recaño, Nicolas Sotomayor, and Francisco Oliva.

ENTRE-RIOS.

General Urquiza signalized his administration no less by his opening the rivers to the flags of all nations, than by his efforts for immigration. The province of Entre-Rios has two colonies, that of San José being the largest in the River Plate.

San José Colony stands 7 leagues north of the town of Concepcion, on the banks of the Uruguay: it has a convenient port, of safe anchorage, and the town which is springing up there is to be called after the discoverer of the New World. The colony counts 200 Swiss, 125 French, 54 Italian, and 15 German families, comprising 2280 persons. The returns for 1863, were—113 births, 33 deaths, 11 marriages. The professions of the colonists, were—22 shop-keepers, 16 masons, 17 carpenters, 7 shoemakers, 6 tailors, 6 blacksmiths, 4 tinsmiths, 5 mechanics, 1 gunsmith, 1 boiler-maker, 1 sawyer, 2 mills, 1 steam-mill, 1 oil-press. The colony boasts a church, a school, and 257 brick houses, valued at £26,000 sterling: there is also a church in construction on the site of the intended town. The concessions are 16 cuadras (70 acres) each. Uncultivated lots are sold at $10 (20s.) the cuadra, the purchaser being charged 18 per cent. interest per annum till the amount be discharged. There are 3,200 cuadras of land occupied, and 1,600 under cultivation; fruit-trees 112,000.

The average annual yield is—

Wheat and oats,	30,150 fanegas.	Tobacco, ...	5 tons.
Indian corn,	15,000 do.	Sweet potatoes,	300 do.
Potatoes, ...	120 tons.	Butter, ...	120 do.
Maní, ...	180 do.	Eggs, ...	170,000 doz.

Besides cheese, melons, peas, beans, &c., in abundance.

The crops of 1865 were so prolific that wheat gave from 35 to 40 fold, barley 30 to 50, and Indian corn three to four hundred fold. The returns of stock were—

Cows and oxen, ...	6,960	Hens, ...	21,500
Horses, ...	1,111	Bee hives, ...	170
Swine, ...	629		

A «cuadra» of *maní* will give a yield of 3½ tons, and the oil extracted from this nut is of excellent quality: hence this is a lucrative article. Ricino is a plant that grows in abundance almost without cultivation; it is now extensively planted, both for the raising of silk-worms and for the oil it contains; a cuadra will give two to three tons. The cultivation of cotton was tried, but without success; the great danger is that of drought, and if the irrigation be improved this industry will be again tried: as much as 25℔ of cotton have been got from a single plant well-watered. The tobacco crop is highly satisfactory, while requiring much care: a «cuadra» gives, sometimes, a ton of very good tobacco. The milk, butter, and cheese of the colony are first-rate, and some of the colonists make £10 to £60 sterling a year, out of these items, in supplying the towns of Concepcion, Paysandú, &c. The colonists also find a ready market for their eggs, and the supply of honey promises to be soon very considerable.

The *Colony of Villa Urquiza* is situate six leagues above the city of Paraná, on the Paraná river. The river bank here rises to a high hill. On ascending this hill we see a beautiful, undulating, country. The concessions are about 30 acres each, but there is no limit to the number that one man may own if he cultivate them. The houses are chiefly «ranchos,» though some better houses of brick, with azotea roofs, are already built.

The chief produce is wheat. Every concession is fenced in, the forest affording the material; sometimes many concessions form one single field of wheat. When the year has been favorable the crop gives 20 to 25 bushels to the acre. It is reaped by machinery.

Cotton has not done well, not for any defect in the soil or climate, but for the uncertainty of obtaining hands on the emergency, for picking. But for this, cotton would pay better than wheat. Land, cattle, and horses, are very low in price. Pasturage, a little way out from the Colony, is abundant. The colonists send to market in large quantities wheat, maize, potatoes, butter, and cheese.

Mr. Forrest and Mr. Russell have bought largely of these lands, and will reap this year some hundreds of acres of wheat. In the course of another year a large accession of immigrants is expected.

The official returns for 1865 are—

«Extent of concession, 6,700 acres: colonists, Swiss 20, Germans 32, French 8, Italians 5, and Belgians 6, families; in all comprising 355 persons, who occupy 232 chacra lots, and have plantations of peach, orange, plum, and fig trees. The colonists are made up of gardeners, blacksmiths, carpenters, masons, shoemakers, and small dealers. The total stock does not exceed 2,500 head. The annual crop averages 3,000 fanegas wheat, besides maize, potatoes, vegetables, cotton, and tobacco. The tobacco is superior to that of Paraguay; it gave this year a fine crop, which was readily sold at 18*d*. per ℔, wholesale. This industry is increasing.» The American preceptor, Mr. Rau, gives the following report (1867):—

«It is a farming colony of about 500 persons, of whom 100 are natives, 200 European Roman Catholics, and the remaing 200 are Protestants, chiefly Europeans. A few Americans are also settled here, and arrangements are made for the settlement of many more American families. The colony is in its infancy, and most of the farmers are poor. During the last few years some of the crops have not been good, and the first houses built by the immigrants have, in very few instances, given place to better ones.

«We have received from the local Government a free concession of a building lot, 200 'varas' in front, and 200 'varas' in depth, making about eight English acres. This ground is finely situated. It is already fenced, and on it we have erected a small house, sufficient for a temporary residence for the Minister. A well has also been dug, in which abundance of good water has been found. We have a contract with a responsible party for the erection of the church, which will cost £300 sterling, and the edifice, when finished, will be occupied for a school also. The minister, being supported as such, gives his labours free as a teacher.»

The enterprise at Villa de Urquiza is one of the «misiones» under the charge of the Rev. W. Goodfellow, D.D., of this city, and from the society that he represents the colony receives help in all these projects.

Besides the above colonies, General Urquiza talks of establishing another on that part of his lands lying between his palace of San José and the town of Concepcion, the settlement to be bisected by a railway, with German settlers on one side, and Irish on the other.

BUENOS AYRES.

The *Swiss Colony* of Baradero is about two miles N.W. of the port of that name on the Paraná, standing on high and uneven ground in a bend of the river bluffs, and commanding a fine prospect. The Arrecifes river, which

abounds in fish, washes one side of the concession, giving water at all seasons to the cattle; as the stream is only sixty feet wide there is easy passage to a beautiful island which has excellent pastures even in the greatest drought. This island is public property, and measures ten leagues by three.

In 1856 the first Swiss colonists arrived, and some of these hard-working men (according to the official report before Government) have been able to make as much as £800 to £1,000 sterling. They are intelligent gardeners, and the soil is so productive that they have raised sweet potatoes weighing as much as a pound and a-half each, while the melons, cabbages, and other vegetables are equally large, and grow in abundance. Potatoes constitute the most profitable of their crops. Some experiments in tobacco turned out so well that the growers were awarded a silver medal at the Agricultural Exhibition of Buenos Ayres in 1856. Mani and linseed have given good results, the first surprisingly so; still, the colonists find potatoes to need less care, and this is their great staple, yielding two crops a year; they also raise sweet potatoes, maize, wheat, and barley. Trees come on admirably, especially peaches, and so favored is the soil of the locality that even palm trees (which are always found in hotter latitudes) are readily acclimatized. Some of the settlers make butter and cheese, for which there is a constant market, either at Baradero or San Pedro; the latter port is six miles North of the colony. The boatmen of the coasting trade are also good customers of the colonists, buying their produce to take down to Buenos Ayres or elsewhere. The colonists know that the greater their produce the readier market they find.

The Municipality of Baradero provide new comers with board and lodging till putting them in possession of their lots. Every able-bodied man receives a lot, 200 varas on each side, about eight acres in extent, on condition of ditching it round, planting a few trees, making himself a hut or «rancho,» and cultivating the ground within a year; if a settler has grown-up sons, each of them may have a similar lot, merely applying to the Municipality for same. The colony counts 873 souls.

Germans,	....	45	Men, ...	....	300
Swiss, ...	....	200	Women,	....	293
French,	....	67	Children,	....	280
Italians,	....	119	Catholics,	....	692
Spaniards,	....	37	Protestants,	....	181
Argentines,	....	345			

The concession may be put down at 10,000 acres, of which one-half is already allotted: there are 18 chacra lots of 12 acres, and 371 of eight

acres, besides 236 garden lots of two acres each; all these are fenced in with wood and wire, and have a ditch. The price is 800 paper dollars per cuadra (30s. per acre), or the rent $90 (15s.) per chacra lot of eight acres, per annum.

The colony has a school, 36 azotea houses, and 285 thatched ranchos; the plantations comprise 63,300 fruit-trees. There are 2 mills, 6 dairies, 3 masons, 3 carpenters, 2 blacksmiths.

The crops for 1861 were—

Wheat,	....	1,091 fan.	Peas,	....	50 tons.
Barley,	....	1,000 do.	Beans,	....	30 do.
Maize,	....	8,104 do.	Butter,	....	50 cwt.
Potatoes,	....	868 tons.	Cheese,	....	75 do.
Sweet potatoes,	....	17 do.	Eggs,	....	19,500 doz.

The farming-stock comprises—750 cows, 9,000 sheep, 100 swine, 1,050 horses, 2,990 hens.

The practical proof of the success of this colony is given in a personal detail of the present condition of many of its members. Some of these poor, but persevering people, on their arrival had a little money, which they invested in cows, horses, bullocks, and fowl. For the first year, they lived in miserable mud ranchos, earning a subsistence by selling eggs and butter, and often having no meat to eat but biscacha flesh. The earliest comers were French-Swiss; but the greater number of those who arrived from 1858 to 1861 were German-Swiss. Out of the list of those given by Señor Piñero—to the number of 14—we select a few examples:—

John Tenoud, French-Swiss, a farmer in his native land, of the Roman Catholic religion, and 49 years of age on his arrival here, with eleven in family, possesses now a capital of 300,000 paper dollars, the greater part of which is put to interest or laid out in sheep.

James Cardineaux, French-Swiss, Roman Catholic, farmer in his own country, 30 years of age on his arrival, with a family of six persons, has now a capital of 150,000 paper dollars placed at interest and invested in sheep.

Amongst the second lot of eight families came Claudio Jamer, a Frenchman, who had kept a small wine and flour store in France, 45 years old on his arrival, with one grown-up son, holds to-day a mill, worked by mules, in which he has invested 43,000 paper dollars, and is finishing the erection of a wind-mill, brought by himself during the past year from France. This mill cost 25,000 paper dollars; he has two plots of farm-ground; a house with one room of azotea roof, and two of straw. He is not in possession of money, but is entirely free from debt.

Here comes a list of German-Swiss, many of whom were obliged to hire themselves out as labourers on their arrival. But see what German perseverance does:—

John Schar, a German-Swiss, a brickmaker in his own country, a Protestant, 37 years of age, self and wife being his only family, exhausted his funds on reaching here, as did all hereafter mentioned, has now a capital of 100,000 paper dollars; one half lent out at interest, and the other half in the house, or invested in draught cattle.

Felix Schaer, a German Swiss, day labourer in his own country, a Protestant, 28 years of age on his arrival, with four in family, has now a capital of 100,000 paper dollars; two-thirds at interest, and the remainder invested in implements and cattle.

Nicholas Hequi, German-Swiss, a butcher in his country, a Protestant, 38 years old on his arrival, his wife and himself constituting his whole family, is actually in possession of 60,000 paper dollars, part of which is at interest, and the rest invested in an azotea house, labourers' tools, and cattle.

The names of Andrew Schaes, a boy only 10 years old on his arrival, and now possessed of 20,000 paper dollars and a house; of Fernando Schachbaum with 40,000 paper dollars; of Alexander Homber with 30,000; and José Matting 50,000, further prove what can be done by agriculturists in the Argentine Republic.

The Municipality of San Pedro (3 leagues above Baradero) offer 30 chacra lots of 6 cuadras (25 acres each) for immigrants, on the following terms. The lots will be either sold at $800 per cuadra (30s. per acre), or rented at $100 or 16s. The tenant or purchaser must pay for survey, &c., the sum of $150 (24s.) There is also a suitable tract of land, 13,000 varas by 4,300, comprising about 10,000 acres, which may be bought in lots from the owner (a private party) for chacra cultivation.

CHAP. V.

COLONIZATION OF THE CHACO.

The Gran Chaco comprises an immense territory, for the most part unexplored, lying between Paraguay, La Plata, and Bolivia. The Argentine Republic claims all that part bounded on the North by the Rio Vermejo and on the S.W. by the Salado, comprising a superficies of 250,000 square miles. The soil and climate are equal to those of the most favored countries, and the natural features are, vast plains of luxuriant pasture, thick forests of various useful timbers, and numerous rivers and lagoons: with such facilities for irrigation, it would be easy to raise any quantity of maize, cotton, tobacco, sugar-cane, and rice. In the beginning of the 18th century, thanks to the efforts of the Jesuit missionaries, several flourishing settlements were springing up, whose ruined remains are still seen near San Javier, the Vermejo, and elsewhere; but at present the interior of the Chaco is entirely abandoned to roving Indians and beasts of prey. After the expulsion of the Jesuits (1767) the Indians returned to a savage life, and so late as 1860 the Tobas tribe murdered some Italian Franciscan missionaries sent to convert them. Only five small «reductions» of tame Indians still remain, according to the report of Padre Rossi, prefect of missions; viz.—

	Men.		Women.		Children.		Total.
Santa Rosa,	220	....	258	....	353	....	831
Cayastá,	175	....	186	....	214	....	575
San Javier,	194	....	205	....	204	....	603
San Pedro,	132	....	142	....	281	....	555
San Geronimo,	200	....	182	....	182	....	564

In February 1863, the Argentine Government commissioned Mr. P. C. Bliss to make a journey through the Chaco, and this gentleman reported five Indian nations, distinct in language, but alike in habits and physical appearance: the Mocovis and Abipones frequent the frontiers of Santiago del Estero and Santa Fé, while the Tobas, Ocoles, and Matacos, inhabit the valleys of the Vermejo and Pilcomayo. The three last tribes are said to number 20,000 souls. The Matacos are very industrious, being the best peons on the frontier estancias of Salta, and in the sugar-fields of Salta and Jujuy. During much of the year the Indians live on the fruit of the algarroba and the «yuchan» or palo-borracho; fish also supplies them with food. They have no agriculture or farming implements. Formerly most of the tribes had cattle and sheep, but the animals seem to have been carried off by a pestilence. The Indians suffer great mortality from want of clothing and proper habitations: they are very superstitious, have a great fear of the Gualiche (or evil spirit), and some confused idea of a future life. Their barter trade is very limited: they sometimes bring to the frontier-settlements a few skins of pumas, jaguars, foxes, otters, &c., but they collect wild honey in considerable quantities, as also ostrich feathers and the resin of «palo-santo.» The Matacos and Ocoles could easily be domesticated, if they were furnished with farming implements, seeds, and a few head of cattle.

In May 1864 an expedition was got up by Government, to open up a highway through the Chaco, from Corrientes to Santiago del Estero, the distance being set down at 120 to 140 leagues. Sr. Arce, the Vermejo navigator, took a lively interest in the enterprise, and General Ferré marked out the road on a map. Passing through the «obrages» or wood-cutting establishments in the Chaco, opposite Corrientes city, the route plunged into Indian territory, broken by numerous woods and marshes. Here the want of water and provisions might constitute a greater difficulty than any to be feared from the Indians. Some caciques signed a treaty with the National commissioner, agreeing to provide these necessaries at various points along the route. The chief profit to be derived from this new highway was that a great export trade of mules and horses would be opened for Corrientes with the Northern provinces. The report of the officer commanding the expedition was as follows:—

«Bracho Viejo, May 22, 1864.

«Dear Sir,

«By the date of this letter you will perceive that notwithstanding all the sufferings we have experienced in this painful journey across the Chaco, I, as well as my companion, Don Adolfo Reyes, am arrived safely at

our destination: the ways and means would form a very long subject for a letter, and I consequently reserve the details until my return.

«The few provisions that we carried were of an inferior description, and had an unfavourable influence on our health, but like true Germans we have already forgotten our past sufferings and laugh at them in the houses of the engineers, Messrs. William H. Cock and Auguste Lemelle, who have received us as if we had been old friends. We are now lodging in the house of the Salado Navigation Company. Major Martinez is rather ill in the Bracho encampment, with the Indians who accompanied us, whose behaviour has been very bad.

«On the 1st of May an Indian ran away, back to Corrientes, with one of the horses. On the 17th another Indian and a boy ran away, stealing our beef and two of the best horses.

«On the 14th the Cacique Dachilique, with his brother, ran away, stealing some of our horses and the only hatchet we had with us. We lost our way during the night and passed 35 hours without water. The Cacique was familiar with the locality and could have found water, but seeing that the majority of our horses were tired, he separated from us, to take the horses to his «tolderia.» He is the same who, three years back, murdered the Franciscan friar at Matará, and he communicated this fact to the Cacique Leoncito, adding that he accompanied us, merely to learn the state of the roads and cattle, so that he might be better enabled to carry on his depredations against the Province of Santiago. Such are the «trustworthy agents» given to us by General Ferré.

«On the 14th of May, at last, we came to the River Salado, and established ourselves in the 'canton Tostada,' now abandoned. Here we found the fine and well constructed «azotea» houses, erected by orders of our friend Mr. Archer, of which we have taken a plan and sketch to present to you on our return.

«The road that we have travelled over is 175 leagues, and we are now waiting instructions and horses from the Governor of Santiago. The road can be made transitable for cargo with very little expense.

«I believe that we will start for Santiago on the 26th, passing by Salavina, and from thence I will write further. I do not know yet when and how we shall return to Corrientes, for this depends upon the measures taken by the Government of Santiago.

«FRANCIS PANKONI,

«Lieutenant Commanding.»

An intelligent Indian interpreter and traveller, named Felipe Sarav who had previously crossed the Chaco, made a journey in January 18(with complete success, and his diary from Esquina Grande to Corrien is as follows:—

«January 21st. Left Colony Rivadavia, crossed to the right bank of t Vermejo, following the stream (three leagues) as far as Selicano: go water, course S.E and E.

«22nd. Started at sunrise, and reached Santa Rosa by noon (four leagues course E. Pushed on (three leagues) to Cañada Angosta, course S.I roads good.

«23rd. Dined at Poso Escondido (five leagues): good water, ro middling, course E. At one part we had to hew a passage of half a leagu Advancing three leagues before nightfall we encamped near a large la which I called Selicano Muerto: road very bad, course S.E.

«24th. Made four leagues to the lake of Paso Yuchan: the route almost impassable, and we had frequently to cut our way through wood About midway is Palo Santo, where a port is projected on the Rio Vermej Leaving Paso Yuchan we cleared a road through three leagues of thicke and one and a-half leagues over level ground brought us to Campo Alegre here there is a good well, course E.

«25th. Reached Poso Verde (five and a-half leagues) by noon. At firs the road is good, S.E.; but we had two and a-half leagues E. throug dense woods, and then turning again S. E. came on a fine lake. Befor night we pushed on (three leagues) to Rancheria, S. E., the route bein impassable even to our sixty Indians on foot, until cleared by four me with axes.

«26th. Starting at six a.m. the path was still impenetrable, and wit great difficulty we made two leagues to Pescado Flaco, where the steame Vermejo grounded last year, and sent her cargo on mule-back to Salta I employed the Chinipis Indians to make a wood-opening here, giving them both money and axes. Course E.: there are two large lakes.

«27th. Using our axes again we made three leagues to Bobadal, E. Tw leagues more through the woods to Yuchanes, E., where there i a fine lake.

«28th. At noon to Codillar, which is three and a-half leagues; at first no road, afterwards level camp, and a lake; route E. Two leagues further to Paso Quebrahacho, over level ground, with water, E.

«29th. To Punta Monte two leagues, level camp, S. E.: here there is a well. To Cañada Larga one league, S., with water. To the well called Pelaco three-quarters of a league, E. After this, half a league of thick

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«It is a farming colony of about 560 persons, of whom 100 are natives, 200 European Roman Catholics, and the remaing 260 are Protestants, chiefly Europeans. A few Americans are also settled here, and arrangements are made for the settlement of many more American families. The colony is in its infancy, and most of the farmers are poor. During the last few years some of the crops have not been good, and the first houses built by the immigrants have, in very few instances, given place to better ones.

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The enterprise at Villa de Urquiza is one of the «misiones» under the charge of the Rev. W. Goodfellow, D.D., of this city, and from the society that he represents the colony receives help in all these projects.

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BUENOS AYRES.

The *Swiss Colony* of Baradero is about two miles N.W. of the port of that name on the Paraná, standing on high and uneven ground in a bend of the river bluffs, and commanding a fine prospect. The Arrecifes river, which

of the Paraguayan war the enterprise was abandoned (The Barrons undertook a second expedition from Mendoza to Chile, in which they were carried off by a savage tribe of Indians, but shortly afterwards effected their escape. Finally they were murdered in San Juan on a third mule expedition, in 1866.) Since 1865 no similar expedition has been made, but the road in question is one of vital necessity, and will probably be the first care of Government on the conclusion of the war. The above named Sr. Arce, at the request of President Derqui, made an attempt to cross the Chaco in 1860: his men (sixty peons) were not prepared for the hardships of the journey, and after three days' floundering through morasses they mutinied; just then a band of Indians fell on them, robbing the convoy, and murdering a friar and six others. Sor. Arce miraculously escaped by floating down the Vermejo on the branch of a tree.

HELVETIA COLONY.

This colony was founded in October, 1861, by Dr. Romang (formerly physician to the Esperanza Colony), who obtained from the Santa Fé Government a grant of four square leagues, on condition of establishing 125 families thereon. It is situate N.N.E. from the Calchines, on the River Cayesta, about a league beyond the Indian village of Cayesta. The first settlers were twenty-four families from Esperanza, and others from Villa Urquiza, who preferred this place on account of its excellent soil and situation, the farming lots being sold very cheap. The average price is 100 Bolivian dollars (£16 sterling) per lot of 85 acres. Dr. Romang's house is in the centre of the spot marked out for the future town and port of the colony: the port is good, and protected by a picturesque and wooded island from the south wind. The river San Javier is about 300 yards wide, and schooners from Buenos Ayres come up to the colony. The road hence to Calchines is mostly through swamps and thickets, with open camps at intervals: the pasture is very poor, unless near the colony, where there is a fine black vegetable earth. Mr. Perkins writes of the locality as follows:—

«A little over a year ago I travelled all over that section of the country, and found it, without exaggeration, the finest place for farming and cattle-rearing purposes I have seen in this country. The ground or soil is black and sandy, and the grass hard; but not near so hard as south of the river Salado. I think for sheep it would not do so well in the beginning; but I fancy that 'gramilla' would make its appearance sooner than near Esperanza, San Jeronimo, San Carlos, &c.

«Romang's grant is situated on the immediate banks of the navigable branch of the Rio Paraná, called by the country folks 'El arroyo del pueblo viejo:' by 'pueblo viejo' they understand an Indian village, Cayesta, at a distance of about twenty-five leagues from the city of Santa Fé. There I have seen the ruins of a church and a number of houses—all seemed to have been built of tapia or adobe: remains of bricks and baldosas could be seen in various parts. The former ground of the church is now used by some of the baptized Indians as a burying-ground: they put pieces of wood and branches of trees on the tombs. Most of them have chacras (fenced in) and grow corn, water melons, pumpkins, and mani.

«The women are industrious: they spin, dye, weave, sew and stitch tolerably well; they rear cattle, have first-rate milch cows, but make neither butter nor cheese, only using milk as a beverage. Their clothing is of the most primitive nature. The land would be capital for growing cotton and tobacco. The milch cows would be very safe and do first-rate on the fine island opposite the shore.

«Dr. Romang has the land divided into lots of five and twenty cuadras, each 150 yards square, and he sells such lots in the immediate neighborhood of the river for 100 Bolivian dollars, a little further off for sixty, and those lots situated two miles from the river for fifty.

«I forgot to mention that within a league of said land there are beautiful forests of a great variety of trees. The forty families who accompany Dr. Romang are all known to me; they are old settlers of Esperanza, and have the routine of the exportation of timber, &c., which is the principal reason, I think, of their removing farther north. They all handle the rifle well, and are not afraid of the Indians.»

The situation is most picturesque, on the banks of the San Javier, which has fringes of fine timber, and some fertile islands. The colony counts 40 families, which comprise 167 individuals, and 100 more families are ready to come out from Switzerland as soon as the war is over. Some of the lands are good, others need drainage, but have excellent timber. The chief products are maize, wheat, and potatoes. Raising pigs promises to be a lucrative business, as the animals are fattened on maize, and the hams sell at 18*d*. per ℔. Cayasta is an Indian village, comprising thirty huts, a house belonging to a Spanish wood-cutter, and the residence of the cacique, Tomas Valdez. It stands on a bluff near the San Javier, with a zone of open camps; but the horizon is bounded on all sides with a dark fringe of wood. All these lands, as far as Saladillo Dulce, are very suitable for colonists, with easy communication with the river Paraná. The Indians of Cayasta are indolent, thievish, and fond of hunting and fishing: the men

are robust, and the women have regular features. Their ranchos are clean and commodious, built of long reeds. They dress decently, even the children wearing shirts. Maize grows well, but is little cultivated.

The colonists of Helvetia lost no time in bringing the land under cultivation: by report dated January, 1866, they had sown as follows:—

43 fanegas wheat,	10 fanegas beans,
126 do., maize,	10 do., other vegetables.
15,000 plants tobacco,	1,000 orange trees,
10,000 do., cotton,	10,500 fruit trees,

Their stock comprised—

760 cows,	80 pigs,
90 horses,	400 sheep.

The Provincial Government has solicited of the National authorities that all subsidized steamers shall be ordered to stop opposite the colony, in the Boca del Riacho Hernandaria. Thus, the colony will come into direct communication with Rosario and Buenos Ayres.

SAN JAVIER CONCESSIONS.

In April, 1865, Messrs. Wilken & Vernet obtained from the Santa Fé Government a concession of 100 square leagues (650,000 acres) on the river San Javier. for the establishment of 250 families from Germany, to whom they would give 50,000 sheep, 4,000 cows, besides horses, &c. The colony was to be established within three years, and the colonists to be exempt from taxes for five years, besides exporting their produce duty free for the same term. The site was well chosen, about thirty-five leagues north of Santa Fé city, and nearly opposite La Paz in Entre Rios. Mr. Vernet's diary of his journey to San Javier is interesting—

«I started from Santa Fé on the 10th of August, at 10 a.m., accompanied by my peon and a merchant of the village of Las Calchinas.

«At noon we arrived at the little village of San José del Rincon, situated about three leagues E.N.E. from Santa Fé. This village has about 1,000 inhabitants, a fine little church, and 10 or 12 stores, or «casas de negocio.» The natives occupy themselves with growing wheat, Indian corn, water melons, and pumpkins (these latter are of colossal dimensions; I was told they harvested last year some weighing about 100℔ each), oranges and peaches for home consumption: all the other produce is exported to Buenos Ayres. San José has a fine port on the river Colastine, and I saw two large schooners loading wheat and Indian corn.

«The road from Santa Fé to San José is rather bad and heavy on account of the «bañados» which must be passed, and is also intercepted by the mouth of the Laguna Grande, which must be crossed in a canoe and the horses swimming.

«From San José leads a road to the village Santa Rosa, or Las Calchinas, situated on the banks of the river Cayesta, which is a prolongation of the Colastiné; this road is also very tiresome for horses, passing through long tracts of «bañados,» and through heavy sands, and is likewise intercepted by a branch of the Paraná, which must be crossed in a canoe. This branch or channel leads a huge quantity of Paraná water into the Laguna Grande, on its north-eastern boundaries. The distance from one village to the other is seven leagues.

«The productions of Las Calchinas are—wheat and Indian corn, which are exported to Buenos Ayres. The port is very good, and I saw two vessels and various 'chalancs' loading. There are about 600 inhabitants in this village, and a fine two-steepled church, of good materials, recently constructed by order of the National Government: there are three or four merchants, the principal one my fellow-traveller, Don Francisco Cardona.

«Las Calchinas was originally a settlement of Indians; but their number is now very limited.

«On the 11th, at 1 p.m., I left the Calchinas, in company with my peon and the 'corregidor,' José Rojas. At dusk we arrived at the new colony, Helvetia. I spent the night at the house of Dr. Romang.

«On the 12th of August, at 7 a.m., we started for San Javier, after having taken the indispensable máte and purchased some provisions for the journey. After a leisure gallop we entered a forest, which has two or three leagues depth on the river Cayasta, and extends, landwards, for several leagues. The rest of the road is open camp, scattered with groups of trees. In some parts the ground is low and swampy, in others, a little high and dry. In some parts the river San Javier touches the *terra firma*, in others it retires, thus forming small islands and 'bañados.'

«The distance from the colony of Helvetia to San Javier is computed by some at fifteen, and by others at eighteen leagues. Half-way there is a beautiful spot on the banks of the river; it is called El Paso del Aguara, and belongs to Mr. Genaro Elias, as also another place a little further to the north, called La Estancia Grande. A little to the south, at Las Algarrobas, is the property of Don Daniel Gowland. Both of these gentlemen are resident in Buenos Ayres.

«At half-past four p.m. we arrived at the village of San Javier.»

Messrs. Wilken & Vernet endeavored to form a company in England, but failed; the concession is now void.

In July 1866, public attention was notably directed to this part of the Gran Chaco as a field for emigration. A French colony was projected at Pajaro Blanco, a Dutch colony near Wilken's grant, a Californian colony on the San Javier, a Basque colony hard by, and another at San Antonio on the Rio Salado. Governor Oroño passed a bill through the Chambers giving estancia lots of 4,000 acres each at a nominal price, the law being as follows:—

Art. 1. The lands bordering on the river Paraná between the concessions of Mr. Charles Vernet and Sr. Navarro, extending back westward to the Saladillo Grande, are hereby given in perpetuity for the use and benefit of immigrant families.

Art. 2. The Government will draw up a map of the territory, marking sites for towns, each of which shall have an area of four leagues square for streets, buildings and a general grazing-common.

Art. 3. Each township shall be divided into building-lots of 50 yards frontage by the same depth, and chacras of 20 cuadras each (80 acres): the building lots to be given gratis, as also the chacras at the rate of four cuadras for each person.

Art. 4. The rest of the territory shall be distributed as estancias of 5,000 yards frontage by the same depth (4,000 acres), or 25,000,000 square yards, to be sold on a year's credit to natives or foreigners who settle thereon, but not more than two estancias can be sold to the same individual.

Art. 5. The price of these lands shall be set down on the map, according to their distance from the river, the nature of their pastures, water-supply, wood, &c. as fixed by Government tariff which shall never be under $300 per square league, nor over $400.

Art. 6. All sales, grants, or concessions will require the indispensable condition of settling on the ground, according to the existing law.

Art. 7. The proceeds of lands sold as in Art. 4 shall be devoted to paying the passage of foreign emigrant families from Buenos Ayres to their intended place of settlement in the territory above described.

Art. 8. The expenses of passage for said families shall be considered as a loan, for which the head of the family must be responsible, and it shall be as a mortgage on the lands ceded or sold to the family.

Art. 9. All moneys advanced in this manner to each family for cost of passage shall be refunded by the colonists, beginning the 2nd year after settling, in a fifth part each year, without any charge for interest.

Art. 10. The moneys refunded as above by the colonists shall form an

«Immigration Fund,» the annual interest of which shall be exclusively devoted to the education of the colonists' children, public works, and other purposes tending to encourage immigration.

Art. 11. The settlers shall be exempt from all Provincial tax or impost during five years after their establishment.

Art. 12. Native families of this or any other Argentine Province, who may wish to settle in the Colonies or in their neighbourhood, shall enjoy the same privileges as are hereby conceded to foreign settlers.

Art. 13. The Government will publish at expense of the State a pamphlet comprising the present law, with a description and map of the territory herein devoted to immigration purposes.

Art. 14. The Government is obliged to report each year to the Legislature on the results of the present law, with a balance-sheet of receipts and expenditure.

The only colonists who availed themselves of this advantageous offer of lands were the settlers from California, who have since established a flourishing colony. Meantime the Secretary of the Emigration Committee at Rosario published a notice as follows:—

«Mr. Oroño has authorised me to state that the conveyance of all persons desirous of settling in the Chaco will be furnished gratis, and orders will be transmitted to the agents of Mr. Cabal's steamer, the Proveedor, to give free passages to such persons from Buenos Ayres to Santa Fé, from which point the Government will furnish transportation by land up the coast. At Pajaro Blanco, the Government has a reserve of sixteen leagues to be distributed gratis, in farms of eighty-five acres, to settlers. All these I have explored, and I give my word that no finer exist in the Republic. The vegetable soil is from two to four feet in depth, and there is plenty of wood; while the low lands in front, through which the San Javier runs, offer the most admirable pasture lands for cattle and the rearing of hogs. Twelve leagues above the flourishing colony of Esperanza, on the Salado River, is the site of the projected colony of San Antonio, where settlers can get grants gratis of 2,500, 1,500, 1,000 and 500 acres, according to their priority of arrival. This place is as yet outside the frontier, and cannot be settled on except by a considerable number of people, say a hundred to a hundred and fifty, for protection against the Indians. The Chaco will give the new colonists all the meat they want. There is a great abundance of deer, large and small, carpinchos, armadillos, ducks, geese, partridges, moor fowl, fish, &c., besides a sprinkling of tigers, wolves, foxes, wild hogs, and vast quantities of the American ostrich.»

THE CALIFORNIAN COLONY.

In the last week of May, 1866, a number of Californian farmers who had come to settle in the Argentine Republic, accompanied Mr. Perkins of Rosario in an exploring expedition to that part of the Gran Chaco lying between El Rey and San Javier, on the banks of the Paraná: the river Rey is in 20 lat., S. The expedition was composed of the following persons and material:—Messrs. William Perkins, leader; J. Aguirre, surveyor; Alexander McLean, James B. Locket, William J. Moore, Zina Port, Francis Binitz, Josiah Reeves, John Smith, Harlow, William H. Moore, Moses J. Moore, Charles W. Burton, Albert Vidler, M. J. English, Charles Stewart, Charles Hildreth, Edward Washburn, John Penington; four peons belonging to the Surveying Department, one 'capataz' and two men for the carts, of which there were two, one ox-cart, and another drawn by horses. In San Javier a number of Indians was added to the party.

They were six weeks exploring the Chaco up and down, and the land proved equal to their best anticipations, except near the coast-line of the Paraná, where the swamps extended from two to six leagues inland. They crossed the River Rey, venturing into the territory of the warlike Tobas, and here they found the land even to surpass what they had seen south of El Rey. On their return to Santa Fé they resolved to establish their first settlement a league northward of San Javier, in a fine tract of land which they therefore bought of the Government. They also applied for 40 leagues of territory, about 13 leagues further north, and 45 leagues from Santa Fé city, intending to have this in readiness when their friends from California should arrive in large numbers. The total purchase-money amounted to 13,300 silver dollars, equal to two and a-half pence per acre. Some of the settlers were men of large means, one having as much as £10,000 sterling.

In the beginning of August they started for their new home in the hunting-grounds of the Mocovies, the caravan comprising 30 men, women, and children, with six loaded waggons, horses, oxen, and baggage: the agricultural implements, machines, and provisions, were sent up by water, in two schooners. Three months later, Mr. Hildreth, one of the colonists, writes as follows:—

«We have finally settled, say half comfortable, as far as houses and their appurtenances go, just one league from the fort of San Javier. The colony at present consists of thirty souls, men, women, and children. The land under cultivation, and which was the labor of six men for six weeks, is one hundred and fifty acres, planted with Indian corn and every variety of

vegetables—all of which are doing splendidly for newly broken ground. The amount of stock, cattle and horses, now on hand, is about 125 head, and good milk and fine butter are as plentiful here as máte and caña below. Our water facilities are as fine as any I have seen in the Confederacy—having a branch of the San Javier in front, and the Saladillo Dulce at the back. The captain commandant at the fort assures us that a 'seca' is never known here, and certainly his words have been verified since our arrival, for it has rained incessantly. All the colonists are much pleased with the land and its locality. If any of your friends are desirous of visiting us, advise them to bring rifles and shot-guns, as game is very plentiful, and two or three weeks can be delightfully passed hereabouts, hunting. Day before yesterday I met three or four of the tame Indians, with thirty-seven large red-deer skins, one tiger, and several fox skins, and which they assured me had been killed near here, and were the work of three days only. Ostriches and their eggs are plentiful, and the latter serve as an excellent substitute for 'hen fruit.' Last Sunday morning at daylight, two of us started for a hunt, and less than two miles from the house we brought down a fine deer, and saw five others; but the little songsters called 'mosquitos' and the heat of the morning induced us to give up the chase, returning home, after two hours absence, with our venison, which was the fattest I have seen in this country. The Indians, of whom we had such bad accounts before our expedition to the Rey, have not yet made their appearance; but we have always ready at hand, loaded and capped, a good supply of rifles, guns, muskets, and revolvers, and as several of our colonists have been old North American Indian hunters, the savages may expect a warm reception if they come with evil intentions. As yet not a single animal has been lost or stolen, and they are allowed to roam at will all day, being seldom seen from the time they leave the corral in the morning until they return at night. Too much praise cannot be given to the captain commandant of the fort at San Javier, for he has extended to us all the civilities possible to make us comfortable and happy.»

A gentleman who visited the colony only six weeks after its establishment describes it as follows:—

«After some four leagues riding, we arrived at the ford of a large navigable river which empties itself into the Paraná opposite Ernandaria; upon its banks nothing can exceed the richness of its pastures. Then the old works of the Jesuits open upon us, and we enter the fort or town of San Javier, full of the largest orange trees I ever beheld, and of Indian huts; the old chapel, and walls of extraordinary bricks, made by the Jesuits, rivet our attention. The new house and church, the work of our host the

Cura, are the largest edifices in the town, and, although yet in winter, I never beheld vegetation more luxuriant.

«The Cura, who undoubtedly rules supreme in San Javier, has built a fine chapel; it is long, broad, sufficiently high, with an iron roof, and most commodious; it has two bells, a sacristy, and the house and garden of the Cura joins it; it is the work of his own hands, save the occasional help he could get from the Indians. Early on Sunday morning we attended his chapel—surprised at the large congregation present. After breakfast we proceeded to the Californian Colony—about a league north of San Javier; how great the contrast appeared between the Indian town and the Christian settlement, where every implement of agriculture, every American invention to aid the colonists, ovens of all classes, culinary and household furniture, besides large tracts of land ploughed to perfection, lay before us! We alighted at Mr. M'Lean's encampment, who was most communicative to us; he told us he had travelled for the last thirteen months—since his arrival overland from California—through Buenos Ayres and the other provinces in search of tillage-land, and that only in the Chaco could he find it to satisfaction. We proceeded with him to the other branch of the colony—about a mile distant—where we were agreeably surprised at meeting several ladies, besides Mr. and Mrs. Moore with a grown-up family of eight in number; one of his sons had just shot a red deer and a number of ducks, but their staple commodity is flour, of which they have a large supply, and their provisions bread, beans, rice, coffee, tea, and sugar, for, save the horses, working oxen, and an odd milch cow, they have no other animals.

«Houses are going up: the colony, which consists of men of every trade, are most enthusiastic, determined to hold their position, and have solicited Government for a further grant of twenty leagues. The rifles of the colony, in quantity and quality, are beyond my description. We met the Comandante of San Javier, Don Antonio Alsogaray, who has large fields of wheat, maize, and alfalfa: his services to the colony are innumerable. We were also waited on by Custodio, the cacique, who expressed his pleasure at our arrival, regretted that most of his Indians were on a hunting expedition, that if we came to trade, until their return we should find almost nothing, as every skin had been purchased by the three traders or store-keepers of the town—Don Benjamin Escudero, an Entre Riano; Don Beltran Duran, a Frenchman; and Don Lucas Caballo, a Spaniard, the Tattersal of San Javier.»

Fray Emitivio, the cura, is an Italian, about 35 years of age, very zealous in his calling and disinterested.

A writer in the *Tiempo* of Santa Fé says—«No less than one hundred years ago, under the gentle sway of the Jesuits, these very plains were waving with maize, corn, and cotton, flanked by a large quinta ,well stocked with fruit trees and vegetables; besides troops of carts, the Jesuits had a fleet of small river craft to convey their produce to this market, and these vessels were made in their own dockyard and by their own shipwrights and blacksmiths. In 1767 the mission had 23,000 head of horned cattle, 3,850 sheep, 3,000 horses and mares, and 380 mules.»

The progress of the colony could not better be described than in the annexed letters, dated January, 1867 :—

«Since we have been here we are doing well; our crops are excellent, all except our early corn, that was sown in a hurry and the land only ploughed once. The regular crop, put in with greater care, is doing very well. I have a fine garden, from which I have just picked a squash from Californian seed that measures sixty-two inches in circumference, and I have as fine water-melons, cucumbers, tomatoes, and other garden stuff as you would like to see. I have thirty head of cattle—cows and oxen. We have planted 150 acres of corn, and have done some ploughing for next season, which is not bad, considering we had such a late start. The Indians have not troubled us at all, in fact we have not seen one yet. The tame Indians of San Javier have not meddled with us either; if they were to do so we would take their whole town. The high water did not become visible to us. It would require a further rise of seven feet to overflow the bottom lands. There is excellent feed for the cattle all over these lands. The officers from the Santa Fé Government gave us a visit; they came up to establish a new line of forts. They were very well pleased with our crop. What we want here are our own country seeds, and Americans to put them in the ground. I have six rows of cotton growing, and it is as promising as any I ever saw in my life in the Southern States. I planted the seeds at different epochs, so as to ascertain the best date for planting. In a few days it will be in full bloom.—A. McLean.»

Mr. Moore, writes:—«Myself and two sons have planted forty acres of corn, and about ten in garden stuff, and everything looks magnificent. My water-melons are as fine as any I ever saw, and my pumpkins, only half grown, weigh from 25 to 30 lbs. The corn, although receiving no cultivation, is very fine. Everything is looking so thrifty, that I am thoroughly convinced that I can raise as good crops here as in any part of the world. Our seeds have run out, but as soon as I can get a supply from home all will be well.»

Another letter, a year later (January 1868), continues to report everything most favorably—

«The California Colony has proved a perfect success so far. Everything that has been planted has thriven well, equal to the best parts of California. The wheat crop has been harvested, and is splendid. The corn is in roasting ear, and is good for any country. Irish potatoes, garden stuff of all kinds, cabbages particularly, melons, pumpkins, &c., I consider very superior. The young orchards are doing finely. The only thing which has failed has been the sweet potatoes. There is a kind of bug (called in North America the lady bug), which destroys the vines. Everything that has been planted has done well. The live stock is equally successful. Cattle, horses, and hogs have done, and are doing well. The colony has never been disturbed by the Indians, and every family which arrives lessens the probability of its being so. The colonists have not lost an animal by Indians or tigers. They have lost a great deal of wheat by the rainy weather, as they have no threshing machine, and had to tramp it out with horses. Next season they will be provided with the best Yankee machinery. If they had had the most ordinary reapers, and threshed, they would not have lost a grain this year. They are preparing to sow a much larger crop this fall. The land in this section is level, but 30 feet above the low lands or 'bottom' of the Paraná. The soil is a black loam about three feet deep, and resting on yellow clay. The grass and herbage grow with great luxuriance at all seasons. The grass is of the same quality as the 'merquite' grass of Texas, and I consider it equal in all respects to that. The 'paja,' or tall jungle grass, grows only on the Paraná bottom or low land, which is at this point 18 miles wide, and intersected with numerous 'lagoons' and lakes. The cattle range in it to a short distance. As for land, there is certainly plenty of it. From this colony northward there is not a house for twelve hundred miles, and the vacant public domain stretches away for hundreds of leagues north and west. There is everywhere an abundance of good fresh water, and plenty of wood, both for fencing and firewood. We make it answer for building our cabins; but it is short and crooked for that purpose. For picket fencing and firewood it has no superior, and there is plenty of it and well distributed. No clearing is required, as the country is prairie, with skirts or ranges of timber extending through it. The timber improves in quality as far up the country as I have been, which is about fifty miles. The climate is healthy: there has been no sickness among the settlers. We have had more rain than we needed this summer. As to the price of land, I suppose the best land here can be bought for $50 s. per acre, and from that down to nothing, and the seed

thrown in. For if any new comer should be too poor to buy, he would have land given him to his satisfaction. What is most wanted now is settlers, American or English, equipped for settling in the woods, and armed to defend themselves, as the colony looks to itself for protection. We have lately had three English families from Buenos Ayres, and two single men from California. If you see any American, English, Scotch, or Irish families, or single men who expect to engage in agriculture, I have no hesitation in saying that this is the best part of the Argentine Republic. For live stock the country is as good as could be desired, but for the present no large number of horses or cattle would be advisable. I say for the present, but the colonists expect to bring large droves next spring. The colony is much in need of a blacksmith's shop. A good smith, equipped for farm work, is a desideratum, particularly an American, or one who has worked in North America. Persons moving up to the colony at present, should come to the town of La Paz, in Entre Rios, which is on the Paraná River, and there charter a boat to San Javier. The charter of a boat from La Paz to this place, San Javier, would be about £5 sterling. The passage to La Paz from Buenos Ayres is $18 s. I omitted to mention that the 'mosquitos' are bad at present, though there were none this summer until lately. I deem it superfluous to say that we have game in abundance, and fish in fabulous quantities. Cotton grows well, and also hemp and tobacco. Please forward any letters which may arrive for me to the same address: Colonia California, San Javier, Santa Fé.»

Mr. Perkins of Rosario, in April 1868, writes as follows:—«One of the Americans from the Californian Colony is down here. He has informed the Secretary of the Immigration Commission that the crops have been excellent, and the people are happy and contented. The Welshmen and their families, from Chupat, under Mr. Davies, are settled now amongst the Americans, and have brought up the number of the colony to about forty individuals. The new French Colony, two leagues this side of San Javier, has now fifteen families.»

At the close of 1868 we have the following accounts:—«The news from the North American Colony is cheering. Their wheat crops are splendid, and the *Tiempo* of Santa Fé says that relatively this colony will give double the products that any of the others will, on account of the intelligence and industry of the colonists. A sample of their wheat sent down to Santa Fé was pronounced the first in the province. The colonists have received several additions to their number from California. It seems the Government considers the contract with Messrs. Wilcken and Vernet cancelled, as part of this concession has been given to the Welshmen, another part

sold to Mr. Grognet, and another to Mr. Laprade, both gentlemen of Rosario. A quantity of the lands of El Rey has also been solicited by purchasers.»

RIVADAVIA COLONY.

This colony is situate on the N.E. bank of the Rio Vermejo, about four leagues below Esquina Grande, in the Province of Salta, up to which point there are no impediments to navigation. It is bounded on the north by the grant belonging to the missionary fathers, on the south and east by the Arroyo Tenco, and on the west by the Rio Vermejo. It covers a superficies of 200 square leagues (1,300,000 acres), extending six leagues in breadth from N.W. to S.E., and forty in length. The soil is mostly alluvial, being periodically inundated by the Vermejo. The colony was established in December 1862, and in January 1864, it counted 54 families, with an aggregate of 550 souls. Since then, numerous «suertes» have been allotted to new settlers, and the colony is now much larger. Each family receives for ever a donation of a «suerte» of estancia, 2,500 yards front, by the same depth (about 1,200 acres), between the rivers Vermejo and Tenco, or double that area if the lands have not frontage on the above rivers; also a building lot, 15 yards by 60, on the site of the proposed town; and a chacra of four acres for cultivation. The chief industry of the colony is in horned cattle, the stock amounting to 20,000 head. The soil is fertile, and large plantations have been made of cotton and tobacco; but at present the difficulty of transport seems insuperable. President Mitre's Government was authorized by Congress to expend all necessary sums for the construction of a road from Corrientes to Esquina Grande: the project has been allowed to fall into complete oblivion; but the road, when made, will pass through the colony and meet the high road of the northern provinces somewhere on the frontier of Salta and Tucuman. Mr. Bliss speaks of his visit to the colony in July 1863, as follows:—

«The long delay of our expedition had given rise to serious fears for our safety, and our arrival at the colony of Rivadavia was hailed with the greatest demonstrations of joy. When the expedition left Buenos Ayres, its supposed destination was the port of Esquina Grande, four leagues above the colony of Rivadavia. The event proved that no one on board had any idea of the geographical and other changes which have taken place in that region within three or four years. Esquina Grande, so noted in all previous itineraries of voyages and explorations, does not now contain a single building of any description, and, in fact, does not now exist as a port. The river has, as in many other cases, changed its course, has dug a canal across

the peninsula, and has thus left the former Esquina Grande some distance inland! The port thus abandoned has, however, been more than replaced by the establishment, during the year 1862, of the new colony of Rivadavia. This colony is situated upon the northern bank of the Vermejo, four leagues below Esquina Grande, and has a grant from the Provincial Government of Salta of sixteen leagues of land upon the river and six leagues back. The colonists were mostly Bolivians of the poorer class, from the provinces of Tarija and Santa Cruz de la Sierra. This large grant of land was looked upon with a jealous eye by the estancieros of the frontier, who coveted that fine extent of territory for themselves. The Indians of the neighborhood were mostly employed as peons, either by the colonists or by the 'fronteristas,' and some of the latter stooped to the meanness and wickedness of prejudicing the Indians against the colonists, hoping thus to frighten them from their enterprise. With the arrival of our steamer the safety of the colony was thought to be secured, especially as three cannon from the old fort of San Fernando were brought to the colony at the same time.»

Mr. Bliss was five weeks making the overland journey from the colony to Buenos Ayres, *via* Rosario.

The latest official report of the colony is only to January 1864. When the navigation of the Rio Vermejo becomes a fact, the colony will spring into great importance.

CHAP. VI.

COLONIZATION OF PATAGONIA.

PATAGONIA may be said to include all that vast territory lying between the Rio Negro (40 deg. S. Lat.) and the Straits of Magellan, and estimated to contain an area of 350,000 square miles. The climate is similar to that of England, and the soil fertile: hence the country is well suited for immigration, and various efforts have been made, within the last six years, for this purpose.

In June 1863 the Government of Buenos Ayres made the following grant to Mr. Louis Bamberger :—

1. M. Louis Bamberger engages to bring out a German Colony, whose total number shall be 10,000 families.

2. The Government of Buenos Ayres grants a free gift of public land in the following proportion: for every 100 families one square league, besides an equal quantity for the benefit of the concessionaire or joint stock company.

3. The Government will provide each family with farming implements, seeds, two milch cows, six heifers, a yoke of oxen, and twelve sheep.

4. The Government will support all the immigrants during six months after their arrival.

The concession never came to anything, Mr. Bamberger failing to get up a joint-stock company.

In the following month (July 1863) the Argentine Government signed a concession for the establishment of a Welsh Colony at the Chupat, which was carried out two years later.

In August 1863 a Frenchman, Dr. Brougnes, who had been connected with the French Colony in Corrientes, formed a project to convert the Indians into colonists, giving them land, seeds, &c., and the Cacique Baigorria promised him every co-operation. He also proposed introducing European settlers, to be scattered along the rivers Negro and Colorado, The scheme died in embryo.

In 1863, Messrs. Galvan, Aguirre, and Murga received a most advantageous concession from the Government of Buenos Ayres, viz. :—«Messrs. Galvan receive for each family a gift of 160 acres land, a bonus of $12s., and the loan of $160 or £32 sterling, to pay the necessary expenses. Messrs. Aguirre and Murga receive 1,600 acres for each family, in fee, but without any subvention in money. The concessionaires propose to pay the passage of the immigrants, providing each family, on arrival, with 300 sheep, six milch cows, oné bull, four horses, and a large piece of land.»

As an immigration scheme it has never been carried out, but numbers of Englishmen have since settled on the lands of Aguirre and Murga, some purchasing the land from them, others going into partnership with them in the care of sheep,

In June 1864 General Paunero submitted an excellent project for a fixed line of frontier on the Rio Colorado, which, but for the Paraguayan war, bade fair to be accepted by Government.

The Rio Colorado rises in that part of the Andes contiguous to Mendoza, almost in direct line from Buenos Ayres, in 35 S. Lat,, and 69 W, Long. pursuing a winding course S. E. until it debouches into the Atlantic, a few miles below our settlement of Bahia Blanca, about 40 S. Lat. Paunero estimated its length at 197 leagues, say 600 miles, and proposed to erect a line of forts with small military picquets at certain distances, along its north bank. He required only 5000 men for so splendid an undertaking, instead of 13,000 troops of the Line and National Guards at present occupied in the straggling frontier service of these provinces.

The advantages to be gained by this scheme were thus summed up :— 1st. An effective and uniform cordon of frontier posts. 2nd. The creation of an impassable barrier, which would prevent communication between the Indians of the Chaco and those of Patagonia. 3rd. The recovery of 20,000 square leagues (a territory three times as large as England) of the finest pasture lands. 4th. A saving of 60 per cent. in the expense of the present frontier forces. 5th. The total relief of civilians from military

service. 6th. The development of a new commercial artery by the navigation of the Rio Colorado. 7th. A safeguard for our sheepfarmers against the perils of drought, these men being formerly afraid to move their flocks towards the Indian territory. Moreover the lands adjacent to the Colorado might be made to produce wheat for the whole Republic, the freight to Bahia Blanca being easy, and therefore cheap.

In September 1864 a German company with a proposed capital of three millions sterling sought a concession for the colonization of 30,000 square miles of territory between the rivers Colorado and Negro.

The Company proposed to Government to introduce 20,000 European agricultural families within five years, on condition of a cavalry force of 2,000 men, under Colonel Machado, being placed for that period to defend the territory from the Indians. Each family was to receive free passage, a rancho, food for the first year, seeds and implements, one horse, two oxen, two cows, and 100 sheep. The emigrant would be required, in return, to sign bills for £200, payable in 40 yearly instalments. Each family was to receive 12 cuadras (50 acres) of land for tillage, and have the pasture lands of the colony in common with the rest.

This enterprise shared the fate of those just mentioned.

The Republic of Chile having always claimed a great portion of Patagonia, that Government commissioned Mr. Cox to explore the whole course of the Rio Negro, as that gentleman held the conviction that fluvial communication existed between the Atlantic and Pacific Oceans.

In 1859, making Port Montt (a German colony on the Pacific in S. Lat. 41.30) his starting point and base of operations, in company with a few determined companions, he passed the neck of the Cordillera at Mount Osorno, and reached the western shore of Lake Nahuel-huapi. But he had not calculated all the difficulties of the enterprise, and was obliged to desist and return to Valparaiso. The Government was pleased with his report, and the explorer only waited a favorable chance to carry out his design.

On the 16th of December 1862, a complete expedition fully equipped by Government, and consisting of 18 persons under his command, again started from Port Montt, and reaching Lake Nahuel-huapi on New-year's day 1863, undertook to cross the lake in a boat left there by Mr. Cox on his former journey. A steep hill on the eastern shore now barred their progress, but they resolutely cut their way through a virgin forest, climbed the perilous glaciers, and Mr. Cox was the first who arrived at the summit, and saw, to his infinite joy, the broad stream of the Rio Negro winding its course eastward, till lost in the brown-colored Pampas of Patagonia.

Having launched his boat in the Rio Negro, he determined to push downwards as far as the Argentine settlement of Carmen or Patagones, at the mouth, on the Atlantic. Fearing a shortness of provisions, he ordered the half of his party to return to Port Montt, and with the rest commenced to descend the river, which he found navigable, with about 10 or 12 feet of water. After some slight mishaps, in coming foul of the hidden obstacles, he had the misfortune to capsize the boat, and his men narrowly escaped drowning: he owed his own safety to a life-belt, the water being here fourteen feet deep. The loss of all his charts and instruments was even less than that of the provisions, on which depended the lives of all the party. Luckily he fell in with a tribe of Pehuelches Indians, who at first determined to kill all the intruders, but the interpreter explaining that Mr. Cox was very rich, it was at length agreed that he should pay a large ransom, leaving four of his men as hostages, while he proceeded to Port Montt. He accordingly returned with the ransom, but instead of accompanying his men back to Chile, remained a voluntary companion of the Pehuelches, whose costume he even adopted, with the hope of accompanying them at the usual time of year in their journey to Carmen, to sell skins and ostrich feathers. Some neighboring tribes, hearing of the Christian who went hunting guanacos and ostriches with the Pehuelches, threatened to make a «malon» with fire and lance if he were permitted to remain in Indian territory, and he saw himself forced to return to Chile, where an account of his explorations has since been published at the cost of Government. By a fortunate coincidence Mr. Cox was wrecked at the very same rapids mentioned by the Spanish pilot Villarin, who reached this point in a small vessel which ascended the Rio Negro from the Atlantic. Hence Mr. Cox considers his expedition realized, and declares the water-course navigable the whole way (excepting about a mile) from one ocean to the other. He speaks highly of M. Lenglier, a Frenchman who joined him in all his perilous adventures. He states that as the Argentines hold the line of the Rio Negro from Patagones to the island of Choel-choel, it would be easy for Chile to occupy the remainder as far as Lake Nahuel-huapi, and by this means a splendid country would be thrown open for immigration, and a navigable highway made available for commerce across the continent.

It would seem, however, that more than thirty years previously the late Captain Smyley had gone the same route: in a letter dated 10th February, 1865, he stated—

«In the years 1828 and 1829 I made a tour of the coast of Chile, from Copiapó to San Carlos (in the island of Chiloe), and from there crossed the

Cordillera of the Andes with the Araucanian Indians. After that, I travelled with the Pampas, Chuhuelches, and Magellan Indians, from the head waters of the Rio Negro as far as the Straits of Magellan, and thence back, over a more southern route, laying down the latitudes and longitudes of the principal places on both routes. I have several times since then travelled with the Indians on most parts of the coast of Patagonia. And I still claim to be the first white man who ever took this route; and I firmly believe, from what the Indians tell me, that no one has ever accomplished it since. I beg leave to differ with Mr. Cox, or any others who find a carriage road across the Andes, or judge the whole course of the Rio Negro navigable as far as the South Atlantic. At the same time I must acknowledge the route to be easy, and, for most of the way, through a fine country. Nor do I think the day far distant when this territory will prove the richest part of South America, both in mineral products and for agricultural purposes.»

In the year 1864, Mr. Orestes Tornero, a native of Valparaiso, solicited from the Chilian Legislature a concession for all the territory lying between deg. 49, S. lat., and the Straits of Magellan, from the Atlantic to the Pacific. This slice of land is 300 miles long (from Cape Virgin in the Atlantic to Cape Desirée in the Pacific), by 250 wide, which would give a superficial extent of 75,000 square miles, almost equal to the whole island of Great Britain. The concessionaire bound himself—1st. To establish colonies on the territory ceded, the minimum number of settlers at the end of ten years to amount to 10,000 persons; and, 2nd. To establish two, four, or more steam tugs. The colonists were to be free of taxes for fifty years.

Another project for colonization and steam tugs was got up by Don Anjel Palazuelos; but it is not clear if either of these enterprises will ever be realised. At present, the Chilian Government is paying much attention to the navigation of Magellan's Straits, having sent a war steamer to accompany H.B.M.'s ship Nassau in the surveys and soundings ordered by the British Admiralty.

In August 1865, a grand project was got up by Don Juan Cruz Ocampo and M. Bric de Laustan (the latter gentleman had much colonial experience in Algiers); their prospectus was as follows:—

«The petitioners propose to form a Joint-stock Argentine Credit Mobilier and Patagonia Colonization Company, within two years from date, with a capital of £1,000,000 to £4,000,000 sterling: such company to have power to emit *Lettres de Gage* guaranteed by Government. They propose to introduce 1,000 families (or 5,000 persons) within five years after formation

of this company, and 3,000 in the succeeding ten years, to colonize the country lying between the Rivers Colorado and Negro, the Government ceding to the company three-fourths of a square league (4,800 acres) of land for each family introduced from any neighboring or foreign country. They further propose to introduce, within five years as above, 800 families to settle south of the Rio Negro, and so on 22,000 families within fifty subsequent years (divided in proportions of five years each), for the colonization of Patagonia proper, the Government ceding as before, at the company's choice, a square league (6,500 acres) for each family so settled. They propose to make these colonies pastoral, not agricultural, advancing to each family a sum of £100 sterling in passage money, house, maintenance for twelve months, and stock of 500 sheep, 50 cows, 3 mares, 2 horses, a waggon, seeds, farming implements, and grazing land: the amount of such advances, with interest and expenses, to be refunded by the colonists in yearly instalments not exceeding 12 per cent., which would be more than covered by the wool. They solicit from Government, besides a league of land for each family (in all 25,800 square leagues, or 155,000,000 acres), the following concession:—

«1st. Authority to govern the colony during sixty years, with a code approved by Government.

«2nd. Half the nett proceeds of import and export duties of the colony for said term.

«3rd. Exemption from import duties on all instruments and animals introduced.

«4th. Maintenance by Government of a proper military force.

«5th. Permission to build docks, railways, schools, &c.

«6th. Sanction for the Credit Mobilier Company's statutes.

«7th. Guarantee for the *Lettres de Gage*.»

Mr. Ocampo died of cholera in April 1867, and M. de Laustan went home to France. This was the last grand emigration scheme connected with Patagonia, only one of which was ever carried out, and the history thereof (the Welsh Colony) we shall now proceed to narrate.

THE WELSH COLONY.

In July 1863, the following concession was signed by the Argentine Government:—

«The Minister of Interior of the Argentine Republic, Dr. William Rawson, in name of the Government, on the one part, and a special committee of the Welsh Emigration Society, composed of the following persons:—G. H. Whalley, M. P., David Williams, High Sheriff of

Carnarvon, and Robert John Parry, of Madrin Castle, Wales—on the other part, have agreed to conclude the following contract:—

«1st. The Welsh Emigration Society shall send out, during ten years, from 300 to 500 families of emigrants yearly, and establish them in the territory of Patagonia, in the Argentine Republic, South of the Rio Negro.

«2nd. The Argentine Government grants to every 200 families a municipal fee in perpetuity of two square leagues of land, the half of such land to be devoted to edifices and public works, such as schools, churches, town-hall, house of correction, and other public purposes; the remaining half to be distributed in building plots, either to be given gratis to the first settlers, or sold afterwards for the reutal support of the colony.

«3rd. In addition to the 25 squares of land given by the law to each emigrant family, the National Government will grant an area of five square leagues for every 200 families, adjacent to the respective municipality, to be divided among them.

«4th. In case the colonists require more land, they shall be permitted to buy or rent the same, of the Government, on the most moderate terms, in accordance with the laws of the country.

«5th. Any mines of metal, coal, or minerals which may be discovered, shall belong to the finder, without any other impost than the 'sovereignty' as decreed by the law.

«6th, The general management of affairs and government of the colony, shall be vested in a commissioner or governor appointed by the National Government, in the manner, and for the period, directed by the laws to be made and provided for territorial jurisdiction.

«7th. The municipal administration shall belong exclusively to the colonists, in accordance with their own regulations.

«8th. The colonists shall be exempt from all military service or contributions for the term of ten years; but they engage to defend themselves, unaided, against the Indians.

«9th. When the population of the colony shall have arrived at the number of 20,000 souls, it will enter as a new province, to form part of the nation, and, as such, shall be endowed with all the rights and privileges thereunto belonging: at the same time its territorial limits shall be definitively marked out.

«10th. The National Government, seeing the distance and solitude of these localities, will furnish the first company of emigrants with 4 pieces of artillery, 50 fanegas Indian corn, 50 fanegas wheat, 50 tons lumber for building, 200 tame horses, 50 milch cows, and 3,000 sheep.

«11th. The society will give timely notice to the Government of the

probable date when the first batch of colonists may be expected to arrive at the port of Bahia Nueva, in order that the provisions, cattle, &c. mentioned in the previous article, may be sent to that, or any other point indicated, in time to meet them on their arrival.

«12th. The colony shall be subject to the legislation to be dictated by Congress, for the government of national territories.—W. RAWSON, J. LOVE, D. JONES PARRY, LOVE JONES.»

The colonists sailed from Liverpool in the barque Mimosa, on April 25th, 1865, numbering 132 souls, and arrived safely at the River Chupat on the 28th of July, the site chosen for the colony being in 43 deg. 15 m. S. Lat., and 65 deg. W. Long. There were 62 adult males, 41 adult females, 17 boys, and 12 girls. From the very outset the Colony has undergone severe vicissitudes, as appears to be the fate of all new settlements; in fact, in the early part of 1867 the colonists determined to abandon the locality, and actually transported themselves and effects some 40 miles to a place of embarkation ready to leave. However, on further council, nearly all returned to their farms, and have been steadily working and progressing since. It appears the great drawback to the place, from its commencement, has been insufficient stock and implements. This has been recently remedied to some extent by the importation of some American ploughs, and 150 milch cows. There are no sheep on the settlement, although there are abundant pasture lands in the vicinity. So far, the colonists have devoted themselves to wheat growing, and, to the extent of their scanty live stock, to dairy produce. These will evidently form the staple agricultural industry of the settlement, but it is expected soon to have a few flocks of sheep in addition. Sealing, salt, and mining operations also, we hear, are in view. The Argentine Government have behaved handsomely towards the Colony. For three years it has supplied the settlers with provisions, it has spent about $10,000 s. in cattle and seeds, &c. for the place, it has supplied all the men with arms and ammunition, it gave half the purchase money for the first schooner of the Colony, and has again assisted in the purchase of another to replace the lost one. All this without any other interest than that of encouraging emigration and developing these territories. Each settler occupies a chacra of 25 squares (nearly 100 acres) on the banks of the river, and receives the Government subsidies in proportion to the family.

The Tehuelche Indians—the genuine aboriginal Patagonians—visit the settlement in tribes every year, for trade and to receive their rations from the Government. The ostrich feathers and skins which they bring are a

profitable source of revenue to the colonists. Many horses and mares have been obtained from them in the same manner.

The latest advices from the Colony give the following statistics:—

Families, ...	33	Church, ...	1
Persons, ...	124	Milch cows.	200
Brick houses, ...	24	Horses and mares, ...	100
Ranchos, ...	6	Wheat sown (acres), ...	250

The Committee of management (twelve in number) and Superintendent of the Colony are elected annually. Secretary, Mr. R. J. Berwxn. Government Agent, Mr. L. Jones.

Five hundred lots, of 100 acres each, have been measured out by a Government surveyor, and it is calculated that the region on which the settlement is placed is capable of supporting 20,000 souls. The ground at present occupied by the Colonists extends on each side of the River Chupat over an area of twelve miles. The climate is very good, a little colder, but drier, and more bracing than that of Buenos Ayres.

Bahia Nueva, which is in the vicinity of the settlement, abounds in fish; and in the adjoining country game is very plentiful. Seals are met with in great numbers on the coast, and inland there are numerous herds of guanacos or wild llamas whose skins are highly prized, and are used by the Indians as their only garment. Stone in great variety, gypsum and salt are met with, the latter article in great abundance. It is also reported that coal exists in the neighbourhood of the settlement.

An interesting account of the colony and adjacent country is given by the Rev. Lewis Humphreys (who was chaplain at the Chupat during the first year of the settlement) in his report to the directors of the Welsh Colonising Company—

«New Bay, the place where we landed, extends twenty-two miles inland and is seven miles across the entrance. It forms a splendid port, perfectly sheltered from all except the east wind, which, however, very seldom blows; and it is spacious and deep enough to accommodate the whole navy of Great Britain at anchor. Mr. Downes, the mate of the Mimosa, assured me that New Bay is the best port of South America for vessels to enter and remain in perfect security.

«The River Chupat flows through at least three distinct valleys, divided from each other by chains of hills. The settlement is at present confined to the lower valley, which is about forty-five miles long and about five miles broad on the average. On the whole the land is dry, though there are a few swampy parts, which dry up entirely when the river is low. The supply of timber in this valley is limited, for though there are trees of many

kinds, they are all small, being generally not larger than the common hazel of this country. There is, nevertheless, a superabundance of brushwood, which will last us for fuel indefinitely, since it grows again after being cut. The second valley is similar to the first, and is very fertile, being covered thickly with cock plants. It contains abundance of sandstone, admirably adapted for building purposes, and the trees improve considerably in size and strength. Six hundred farms, of 100 acres each, have been measured out in this valley, in readiness for the second company of emigrants. The third valley has been only partially explored. It is narrow, and bounded on each side by rocks. What lies higher up the river is not yet known. The river water is pure and sweet, though its color is somewhat cloudy, and near the surface is frequently brackish. The unanimous verdict of every one of us is, that the climate is delightful and very healthy. A few were ill some weeks after landing, owing partly to the fatigue of carrying and arranging heavy goods, and partly to their frequently getting wet through and allowing their saturated clothing to dry upon their persons; otherwise no cases of sickness occurred, whilst many instances might be given of the perfect restoration to health of invalids. Indigestion, headache, toothache, colds, and consumption are unknown there, although I and many others have frequently slept in the open air night after night in the depth of winter, which is so genial that no evil effects followed an amount of exposure which would certainly have proved fatal in any part of Great Britain. Owing, however, to our being compelled to subsist on salted meat during the passage out, and for the first few months after landing, the majority of us suffered more or less from scurvy, and some of us from boils. Still, all these inconveniences did not prevent our enjoying to the utmost the splendid atmosphere, which kept us constantly hungry, and was praised by every one as the 'healthiest a man ever breathed.' I believe that every person in the colony ate double what sufficed him at home. With such an excellent climate it is not surprising that the land should be extremely fertile. We discovered several kinds of edible wild plants, such as wild celery and turnips, and a sort of potato, all of which were very good.

«Various unavoidable delays which took place at Liverpool and at New Bay prevented our settling ourselves ready for work until about two months after the proper season for sowing wheat, consequently all hopes of a crop for the first year had to be abandoned. We sowed small quantities of Indian corn, barley, potatoes, and garden seeds, all of which grew excellently, and yielded a gratifying crop. It is absolutely necessary to sow wheat before the end of the winter, in order that it may fructify before the period of summer heat, which would otherwise scorch it rather than

ripen it. The wheat harvest takes place about Christmas, so that the news about the crop cannot reach this country before the end of January next. We labored under the grave disadvantage of not possessing an adequate stock of implements of husbandry, and consequently were unable to sow as much as we ought to have done last season. We had two ploughs from England, and Mr. Lewis Jones obtained an American plough at Patagones. We had also a few Argentine ploughs, but they were of very little use. We kept two men constantly at work ploughing, and succeeded in sowing about sixty acres with wheat; and when I left they were busily engaged preparing ground for a second setting of potatoes, Indian corn, &c. We had at that time been supplied with many thousands of young trees for planting, among which were 4,000 fruit trees. The people generally were in excellent spirits, and looked forward to success as a certainty. Those among us who at first took a desponding view, and neglected to cultivate their farms, now praise the climate and the land, and resolve to work in earnest. Nothing whatever was wanted but a crop in its due season, and every indication appeared to justify our expectations of a favorable harvest. The locality has shown itself to be highly satisfactory, and our faith has given place to the certainty resulting from the possession of tangible proofs. And I may be permitted to observe here that as the products of the Chupat valley correspond in all other respects to those of the Rio Negro valley, there is no reason to suppose that wheat and sheep will prove to be exceptions. At the Spanish settlement on the Negro (Patagones) wheat has been largely grown during the last twenty years on the same ground, and the increase has been frequently as much as forty-fold. I learnt also that the increase in sheep at Patagones has been very pleasing this year. On one estancia alone there are 100,000 sheep, being an increase of no less than 30,000 in one year. The capital on that place last year was 70,000 sheep. Cattle are fat, and horses plenty. The sheep we had at New Bay were large and well-woolled, and no doubt they will have increased in the same proportion as the sheep just mentioned; in fact, they were brought from the very flocks referred to. Our horses and cattle were remarkably fine and fat, even in winter, when they require no housing or other attention, as the pasturage is abundant and excellent all the year round. At the time I left we had about 100 cattle, sixty of which were milch cows, two full-grown bulls, and a number of younger ones. We had about forty horses, and each family possessed pigs and fowls, all of which were increasing rapidly. In some of the farm-yards the fowls were sufficiently abundant to recall to mind the homesteads of Caermarthenshire. None of us chose to kill cattle for food, owing to the paucity of their number, and

the pigs and fowls had not increased sufficiently for us to commence eating them; and, indeed, there was not the slightest necessity to interfere with them, for the whole territory literally swarms with game; hares, guanacos, armadillos, ducks, geese, partridge, and ostriches, and the river and bay furnish an ample supply of fish. The hares are very large, and commonly weigh from 18lb to 20lb, whilst the birds are very fat and frequently find their way into the cooking-kettle.

«It is an act of the merest justice for me to state that the Government of the Argentine Republic has acted in a most liberal and praiseworthy manner towards the Welsh Colony. Our president, Mr. William Davis, visited Buenos Ayres near the end of 1865, and obtained from the Government a monthly grant of $700, to be paid until the colony becomes self-supporting, and supplies have been regularly furnished ever since through the agency of Mr. H. Harris, a merchant long established at Patagones. I must also not omit to mention gratefully the valuable assistance afforded us by the native Indians. The chief of the tribe sent us a letter asking for English saddles and rum, in exchange for skins, &c., and I understand that a treaty of peace and commerce has since been made. Two families of Indians have been several months established in the colony, and to their assistance we owed the greater part of game we obtained. They bartered large quantities of fresh meat for small pieces of bread, and exchanged mares for horses. The colonists now possess about 40 dogs, and the consequence of both these circumstances, is, that they have begun to tire of a superabundance of fresh meat. When I left, very few persons lived in the fort: the majority had built brick-houses, and many had gone to live upon their own farms.

«In the proper season, seal-fishery is carried on to a great extent along the coast of Patagonia, principally by English and North American sailors, who know their haunts. On several occasions some of the settlers have seen multitudes of seals basking on the beach of New Bay, and have killed a few with sticks. New Bay is a general rendezvous for vessels engaged in this business, and a trade has sprung up between them and the settlers, which will become an important element in the well-being of the colony, as soon as we are in a position to supply them with fresh provisions, &c. Some of the settlers have visited a number of Guano islands, which lie within easy reach of the colony, and have seen the guano, but as it varies greatly in quality, even on the same spot, it will be necessary to employ men well acquainted with it to superintend the selection and loading of a cargo.

«Having thus touched upon all the points connected with the settlement

that I can call to mind, I will relate two important and interesting episodes. On the 17th September, 1865, the Comandante of Patagones, accompanied by several Argentine officials and a military guard, performed the ceremony of formally giving us possession of the territory and naming our first town the 'The Rawson,' in honor of Dr. William Rawson, the Minister of the Interior, who has manifested a true and deep interest in the establishment of the colony. In March 1866, a sealer entered New Bay, and two of the settlers availed themselves of the opportunity to migrate to the Falkland Islands. This desertion suggested to others of a similar class the idea of sending a memorial to the Falkland Islands praying to be removed from the Welsh settlement. The memorial misrepresented the state of affairs, and was dispatched without the knowledge of the general body of the settlers. In consequence of that memorial Her Britannic Majesty's ship Triton visited the colony in June last, to remove the people in a body, if necessary. This offer caused the greatest astonishment in the settlement, and enquiries were made to ascertain who among them had been guilty of sending the memorial. The commander of the Triton produced the document for inspection, when it was found that very few names had been appended, and the greater part of those individuals denied their complicity when taxed with it. We at once declined to leave the colony, and the Triton, having assisted us to repair our little schooner and presented us with a cask of lime-juice, left us where we chose to remain.»

In 1868 a sad misfortune befell the colony in the loss of the little schooner and six of the colonists, viz.:—Robert F. Nagle, captain, from Liverpool; George Jones, from Liverpool; James Jones, from Caermarthenshire, having a wife and family in the colony; Thomas D. Evans, Manchester, also having a wife and family in the colony; David Davies, from Aberdare, having his parents in the colony; and Thomas Cadivor Woods, Secretary of the Welsh Colonising Company at home, who had recently arrived in the Colony to report upon it, and had taken a trip to see Patagones before returning home.

The colony sustained another loss in the departure of ten settlers, who have joined the Californian colony in the Gran Chaco. Latest advices are, however, more cheering:—«The Colony is marching steadily onward. The provisions, clothes, and wheat, barley, and cattle were all safely landed, and caused universal joy and activity. Active Indian trade has been done, and was doing when I left.»

The success of the Welsh Colony may be said to rest on the future support it will meet with in regard to an augmentation in its number. It is almost superfluous to remark that any new batch of emigrants would not

encounter the same misfortunes that befell the original settlers. Too great stress, however, cannot be laid on the following points as a guide to emigrants who may contemplate joining their countrymen:—

1. That they should come out with some capital.

2. That they should bring with them ploughs, hand-mills, seeds, and lumber, for the construction of huts, as there are few trees in the country.

3. That they should sail from England in the month of March, in order to arrive at the Chupat in time to prepare the ground they will be called upon to cultivate, before the season for sowing, which in this country is in the months of May and June.

FREE LAND-GRANTS AT BAHIA BLANCA.

It will interest many Englishmen who come to this country with the intention of settling, to know that camp can be taken out direct from the Argentine Government in «propiedad,» at Bahia Blanca to the extent of one «suerte» (6,700 acres) in one name, on condition that a house or «rancho» is built upon the land, and a flock of sheep placed upon it, within one year after allotment. The cost of solicitation and surveying, &c., say £40. By a flock of sheep is meant 1,000 head.

After allotment of camp a deposit is required of $10,000 m|c. or £80, to be made with the Provincial Bank, which is returned when the above conditions have been complied with, but is forfeited should the depositor fail to comply. The Provincial Bank allows six per cent. per annum on this deposit. At the end of two years, when the Justice of the Peace of the district has certified that all conditions have been duly carried out, the title deeds are forthcoming. It must be distinctly understood that the land must be occupied during the whole of the term of two years. Land can still be obtained within twelve or fourteen leagues of the town and port of Bahia Blanca, and all the banks of the numerous rivers in the neighbourhood have not been taken up, though with the increasing number of new settlers going down this will not long be the case.

It is stated that vessels of any tonnage can enter the bay, and there seems no doubt that a good landing place might easily be found. The present settlement is composed chiefly of Englishmen, who would welcome any new settlers, and give them all the assistance in their power. The close proximity of the Indians is the chief drawback; but so long as cattle is not reared, there is little to tempt them within range of the Snider rifles. Indians cannot carry corn on horseback, neither do sheep travel on foot fast enough for their purpose, so this is no very great impediment after all. The frontier is to be moved to within thirty leagues of Bahia Blanca,

at the close of this unhappy war, which will give greatly increased protection.

The land and climate are both admirably suited for agriculture, and the natives grow a great deal of corn there already. It may be mentioned, that scarcely three years ago land could be obtained at Azul on the same terms as at Bahia Blanca, and it now fetches $100,000 or about £800 per «suerte.» The latter place has the great advantage of a seaboard, while all the produce of the former has to be conveyed to market in bullock-carts at no small cost.

Sheep—Picked flocks can be bought at $20 m/c, or 3s. 4d. per head, and fatten wonderfully on these camps. There seems no reason why sheep-farmers should not boil down their own sheep, and thus net the profit of the saladero, and save the great loss of grease, which travelling any number of leagues must always entail. This could the more easily be done here, as the transit is comparatively easy.

Intending settlers should secure the services of some good English laborers, as native labor is both scarce and dear. The usual wages are from $300 to $350, or say £2 10s. to £3 per month. A steamer runs once a month between Buenos Ayres and Bahia Blanca, and as there is no opposition at present, the charges are very high, but directly there is sufficient trade to make one pay, it will not be difficult to get one on the berth to make regular passages at moderate rates. There is also an Italian schooner which makes frequent trips to Bahia Blanca, bringing up the produce of the place. Bahia Blanca being situated so far from Buenos Ayres and Montevideo, will never be troubled by the many revolutions which so often occur here, which is of itself a great thing in its favor. In the face of the bad returns that sheepfarming has given during the last few years, coming settlers ought to turn their attention in the direction of this noted corn-growing district.

An Englishman who recently made a trip to Bahia Blanca and Patagones, describes those places as well suited for new settlers; his narrative is the following—

«We started from Buenos Ayres in the steamer Patagones, on the 10th ult., and after three days of beautiful weather arrived at the port of Bahia Blanca. The entrance to this place must prove a great drawback to its future advancement, as the windings of the channel remind one of trying to follow the turns of a corkscrew. From the steamer's anchorage to the shore appears to be about a mile distant, but the windings of the creek are such that the boats have to be rowed at least a league. However, having overcome these little difficulties, we reached the mole (which is constructed

of several old bullock carts), and were kindly received by Señor Coronti, who furnished us with horses to proceed to the town, which is about two leagues from the landing-place. Having taken a walk round in the evening we saw all that is to be seen about the town, which is not much, though there are some nice chacras and quintas in the vicinity. Next morning, Señor Coronti had horses ready for us, and his son kindly accompanied us as a guide, to have a look at the camps on the Naposta, which is a small river rising in the interior, and running through the town. For two or three leagues up the stream the valley of the Naposta is under cultivation, and the wheat crop looks very promising. The camps we found much better than we had anticipated, and Señor Coronti offers very fair terms to settlers, and great praise is due to him for the way in which he has exerted all his energy for the advancement of Bahia Blanca, and for his unbounded hospitality to strangers. In the evening we were introduced to the commandant, who showed us through the fort, which, in comparison with the others we have seen on the frontier, is certainly a model of neatness and order. The following morning we embarked for Patagones, and in eighteen hours found ourselves off the mouth of the Rio Negro; the bar being in good order for crossing, we at once entered this finest of Argentine rivers, and steamed up to the town of Carmen or Patagones, lying about seven leagues from the mouth of the river. We were favorably impressed with the first appearance of the country. The banks on each side of the river (which at the town is about 150 yards wide), are beautifully laid out in chacras, quintas, &c., and the trees and range of hills beyond reminded us more of the old country than anything we have as yet seen in South America. Having effected a landing, which is much more easily accomplished here than in most Argentine ports, the steamer lying within about ten yards from the north bank, we found that Patagones was far before the sister town of Bahia Blanca in its accommodation for travellers, each family seeming to vie with the other in trying to make strangers feel at home.

«But, to resume our journey. The next morning, having got horses from Señor Aguirre, who offers every assistance to parties wishing to look at the camps, we started up the north side of the river, which, for a distance of six or seven leagues, until you reach the Fortin, is thickly covered with a bushy scrub, the range of hills coming down to the river's edge. But, after passing this, the country opens out into fine level camp, lying between the hills and the river, which we found covered with excellent pasture. The sheep and cattle were very fat, and the flocks remarkably clean. Towards evening we arrived at the China Muerta estancia, belonging to Señores Heusser and Clarez, where we stayed till next morning. This

estancia is one of the finest in this part of the country; the camp i excellent, and has a large river frontage, besides permanent 'lagunas' in th back. Next morning we resumed our journey, and arrived at the Guardi in time for breakfast. This is a stirring little place, there being no les than six stores, all of which seem to do a strong trade with the Indians several tame tribes of the latter live in the vicinity, and are constantly t be seen going about in their native costume of 'quillangos.' The sam evening we arrived at the estancia of four Scotchmen, the first of ou countrymen settled in this quarter, and who, with their proverbial hosp tality, insisted on our making this our headquarters during our stay. W were happy to see that though but lately started they had made very fai progress, and were looking forward to good returns.

«We crossed the Rio Negro at the Guardia, and swam our horses over and then rode up some four leagues to the 'tolderia' of the Indian caciqu Saihueque, who had just arrived from the Manzanas, with about 130 men From Buenos Ayres accounts of these Indians we expected to meet a set o ferocious savages, and consequently felt rather doubtful what kind o reception we should get; but we were agreeably surprised to find th chief a fine looking, intelligent, and altogether superior man, who receive us very kindly. We spent a couple of hours with him, squatted in front o his toldo, and before leaving we purchased a few skins, &c., from them and returned highly delighted with our visit. To a stranger, an Indian 'tolderia,' or encampment, with its huts of guanaco skins, and its swarthy inhabitants variously engaged--some cooking, some bringing firewood, others sleeping, and the women sewing the 'quillangos' with ostrich sinews—the war lances stuck in the earth in front of the tents, and the immense number of horses feeding over the plains, is altogether an imposing and interesting sight. These Indians do not disturb the country, as in the northern provinces; but come in, quarterly, for the rations allowed to them by the Government, and therefore it is to their interest to keep themselves quiet.

«Returning to the north side, we rode up some eight leagues further on. Here, as lower down, the camps were in excellent condition. The 'rincons' formed by the river are very numerous, and well suited for agriculture; this is carried on to a good extent in the district, both sides of the river being under cultivation, and the wheat crops looking very promising. The next day, having said good-bye to our countrymen, we again crossed the river at the Guardia, returning to the town on the south side. Here the camp looked beautiful, and was of much larger extent than that on the north side, the hills being very far from the river.

«The Rio Negro is well wooded on both sides, and studded here and there with islands, some of which are under cultivation, and others covered with trees, adding much beauty to the scenery; in fact, the view from some of the higher points of the hills, looking up the river, we have seldom seen equalled. The river seems to vary very little in breadth, and from good authority we learn that it has been navigated for forty leagues higher up by a pilot-boat drawing four or five feet of water; but, unless propelled by steam, this navigation must be tedious, on account of the strong current running down.»

ENGLISH SETTLERS ON THE RIO NEGRO.

Advices from the Rio Negro to September 1868, are as follows:—

«The English settlers are going on very prosperously, and are planting wheat in large quantities, at the same time they have sheep and cattle. Messrs. Frazer and Co. have a league of excellent land on the banks of the Rio Negro, in a 'rincon' formed by a bend of the stream, about thirteen leagues above Patagones; they have sown fifty fanegas of wheat, which at present looks beautiful, and next year they intend laying the whole of their land under the same crop. Three families formerly of the Chupat Welsh Colony, are settled about twelve leagues higher up than Frazer's; their wheat is also in excellent condition. In fact, the whole country looks blooming with corn-fields at greater or lesser intervals, and the Rio Negro is rapidly becoming a wheat country. Englishmen arrive at Patagones by every steamer, to lay down wheat, as land is very cheap, and there is no fear of Indians. Government grants of land may be had higher up the river, and Messrs. Aguirre and Murga are sending down, at once, a little steamer drawing three feet of water, for the navigation of the Rio Negro. Messrs. Kincaid have also a fine estancia, nineteen leagues from Patagones, where they are also planting wheat, and have some sheep and cattle, besides a splendid quinta. The government has resolved to place 1,500 men on the Rio Negro frontier, and the first batch of 150 goes down immediately. This shows that our legislators attach due importance to the rising colony, in which Englishmen are becoming the chief settlers. We understand there is a project before the Chambers, for a railway from Patagones to Salinas, for the conveyance of salt to the seaboard. The flour-mill now building on the banks of the Rio Negro, about five leagues from Patagones, will be concluded before the end of the year, and will prove a great boon to the town, as hitherto the wheat had to be ground by hand.»

FOREIGN SETTLERS AT BAHIA BLANCA.

The following are the names of the principal foreign settlers at Bahia Blanca. Those marked with an asterisk (*) are already occupying the land:—

*P. Corronti,	*Arthur Mildrod, and 2 English laborers,	P. de Montravel,
*J. Birtoli,	*J. H. Edwards,	J. Corbyn,
*Fusoni Brothers,	*R. J. Greuie,	J. Barber,
*George Claraz,	*H. Hentze,	William Perkins,
*J. Arnold,	*Richard Newton,	F. Daniel,
*John Sinclair,	J. Schuriz,	— Webb,
*Richard Tillard,	H. W. Goodhall,	E. Herbert,
*S. J. Eyre,	F. Smiles,	A. Huber,
*John Mildred,	Rev. Mr. Powell,	L. Jacob,
*E. P. Goodhall,	T. Fallon,	J. Jaccar,
*Bryan Smith,		J. Jockez.

The greater number of the English portion of the above are settled on the banks of a river, known as the Sauce Grande, situated about ten leagues from Bahia Blanca, to the north. They have some twenty-five squares of land under cultivation, sown with wheat, barley, and maize—this being their first year—and we may look forward to seeing three times this extent of camp turned up for next season.

By the commencement of 1869 a large brick-built estancia-house will be finished, and before June next two other smaller ones.

We have great hopes of the newly-elected President, Señor Sarmiento, and trust he may afford us the protection that is alone wanted to make this part of the Republic a most prosperous district. He may rest assured that European energy, combined with capital, will accomplish the work of civilisation, if it is only allowed to run its course unmolested, and in a very short space of time will change a comparatively waste corner of this province into a thriving and populated country.

CHAP. VII.

RIO DE LA PLATA AND TRIBUTARIES.

The River Plate is one of the longest rivers in the world, including its two great tributaries, the Paraná and Uruguay. Suffice it to say that the traveller can take steamer at Montevideo and ascend without interruption to the capital of Matto Grosso, a distance of over two thousand miles. At Montevideo the river is about 75 miles wide, but the water is brackish: at Buenos Ayres the water is quite fresh, and the river is 28 miles wide. Twenty miles above Buenos Ayres we arrive at the junction of the Paraná and Uruguay. The lower Paraná is about 900 miles long from its embouchure, near San Fernando, up to the Tres Bocas, above Corrientes: the upper Paraná, from the Tres Bocas to the Salto de Guayra is only navigable for small boats. The Paraguay river, which debouches into the Paraná at Tres Bocas, is navigable as far as the Cuyabá: on this latter stream is built a city of the same name, residence of the Brazilian authorities of Matto Grosso, about 1,100 miles above the city of Asuncion, the capital of Paraguay. The Uruguay is ordinarily navigable only as high as Salto, but in flood-times the steamers ascend the rapids and go up to Uruguayana and San Borja, in the Brazilian province of Rio Grande. The Rio Negro is one of the chief affluents of the Uruguay; the Salado of the Paraná; and the Vermejo, Tebiquari, and Pilcomayo fall into the Paraguay.

THE PARANÁ.

Buenos Ayres to Matto Grosso.

Before the breaking-out of the Paraguayan war there was a regular Brazilian monthly mail-service from Buenos Ayres to Cuyabá, making the trip in ten to twelve days. The vessels were of light draught, and the accommodations pretty good. At the same time the Paraguayan Government had a fine line of steamers plying twice a month between Asuncion and Montevideo. Various private companies also had steamers running from Buenos Ayres to Corrientes, and an ineffectual attempt was made to navigate the Vermejo. The scenery from Buenos Ayres to Cuyabá has much of interest for the traveller, although at times the coast is low and marshy, and the wooded outline of the Chaco, at last grows monotonous and wearisome: there are sundry important towns and halting places.

If we leave the roadstead of Buenos Ayres on a fine morning, nothing can be more charming than the panorama of the city and suburbs. We pass, in succession, Palermo with its plantations to the water's edge; Belgrano, seated on a gentle acclivity, Point Olivos, a handsome promontory, where a new town has been projected; San Isidro, with its delightful country-seats; and San Fernando, at the head of the estuary of La Plata.

We enter the Paraná by one of its many mouths, the best known of which are the Guazú and Palmas: the latter is the shorter route, used by small steamers which touch at Zarate and San Pedro. The delta of the Paraná comprises a multitude of fertile and picturesque islands, planted with fruit-trees; and if the traveller halts at San Fernando or the Tigre, he can amuse himself for several days by boating in the Conchas and Lujan rivers, or making an excursion to the Carapachay islands. These islands are poetically termed the Argentine Tempe; they teem with the richest fruits, and a number of Italian charcoal-burners are the principal inhabitants. We do not get a glimpse of the mainland till reaching Campana, the estancia of Dr. Costa, late Minister of Education, who has built a fine house on the bluff.

Zarate is a straggling village of 1,000 inhabitants, with a small trade in grain, firewood, and vegetables. The principal shopkeeper is an Italian, Constancio Silvano. There is a new church, also a tolerable Basque inn, and two public schools which are attended by 106 children. The adjacent estancias of Latorre, Lima, Saavedra, and Fox, are worthy of mention. The cultivation of grain has greatly increased of late years. During

the Paraguayan war this has been the chief port for shipment of horses. The 'barrancas' on our left are precipitous, and here and there crowned with a hut or ombú-tree, till we reach—

Baradero: this is another small port, comprising 105 houses, a church, and an unfinished school-house. The place derives some importance from a flourishing Swiss colony. The department comprises ninety-two estancias, of which seven belong to Irishmen: the largest proprietor is D. Patricio Lynch.

San Pedro is a better town than the preceding, and looks well from the river: it has a new church, fifty-six rateable houses, and two public schools. D. Martin Pagardoy keeps a good inn, and is favorably known to all the Irish sheepfarmers. A little above San Pedro is the pass of Obligado, where the English and French cut the chain placed across the river by Rosas. Higher up is the fine estancia of Llavallol, at a point of the river called Rincon de Las Hermanas, after which we pass the Rincon Ramallo.

San Nicolas is the last town in the territory of Buenos Ayres; it is a place of some importance, having received the rank of 'city,' with a population of about 8,000 souls. It has 300 rateable houses, besides Mr. Armstrong's valuable mill. It is the centre of a district which comprises sixty-five estancias, and a number of chacras under wheat.

By daybreak we are coasting the territory of Santa Fé, and in less than twenty-four hours from our departure from Buenos Ayres we are in sight of Rosario: the steamer goes alongside a wharf, there being deep water close to shore.

Rosario is the great outlet of the upper Provinces, and will shortly be connected by railway with Cordoba, the chief city of the interior: the trade of the port has much increased of late years, especially since the beginning of the Central Argentine Railway. The 'barranca' is so high that there is no view of the place till you reach the Calle Puerto. It is a well-built town covering 150 cuadras or blocks, with a population of 20,000 souls. The plaza, parish church, custom-house, market-place, and Jardin de Recreo, are worthy of notice: the theatre was recently burnt down. The railway terminus and workshops at the North end will repay a visit. The town also possesses two mills, three saladeros, two cemeteries (for Catholics and Protestants), a public hospital, an American chapel and school, and gas-works in course of erection, There are some good hotels and coffee-houses. Messrs. Keane and Soames, agents for the *Standard*, will give strangers any information they may require. Mr. Hutchinson, H.B.M. Consul, lives beyond the railway terminus. Excursions may be

made by rail to the English settlement at Frayle Muerto, or on horseback to the fine English estancias in the valley of Pavon. For further particulars of Rosario, see the chapter on Santa Fé province.

On leaving Rosario, the first thing that calls attention is Mr. Wheelwright's mole for landing materials for the Cordoba railway; they have cut away the 'barranca' and erected works projecting into the river. We next pass Urquiza's saladero, and another a short distance higher up. The Parana is here very wide, at least 2,000 yards, and the current runs three miles an hour, the water being very deep in the channels. The islands on all sides are low and slightly wooded, and we can see the mainland on either side.

About six leagues above Rosario we sight the edifice of San Lorenzo, with its tapering belfry and large convent. This was erected by the Franciscan missionaries, years gone by, with the probable view of forming a nucleus of civilization on the frontier of the Indian territory, and is excellently adapted for a river port, having a small cove hard by. The cove alluded to, was the scene of the first struggle for South American independence; General San Martin (1810) here attacked a Spanish force which attempted to land, defeating them with a handful of cavalry.

The high land on our left soon merges into a network of islands, the deep water channel skirting along the opposite coast, which presents a number of inlets, through which we get glimpses of wood and dale, perfectly charming, in contrast with the sloping 'barrancas' of sand-stone or tosca. The soil of these, generally presents to the eye a superficies of luxuriant grass, or thick shrubbery, and casually a grove of trees, resembling the olive, at a distant view. The section made in successive ages, by the river, shows a variety of geological strata. A thick, loamy, dark soil, of six or eight feet, covers a layer of sand, beneath which latter, the hard tosca stretches down to the water's edge, the base being lined or interspersed with sand heaps, fragments of boulders, or trunks of uprooted trees.

The approach to Paraná, is highly picturesque: towering bluffs of red sand-stone, here and there relieved by a wild furze of deep green, the effect being very pleasing to the eye. There are several lime-kilns along the Entre Riano coast, as the sand here makes excellent lime: it looks like tosca, and the lime appears of the best quality, its snowy heaps studding the beach. About a mile below Paraná are some hulks, used for coal deposits. The town of Paraná is not visible from the landing-place. The scenery of this part of the river, all the way from Rosario, is interesting, but there is a solemn stillness on these rivers that almost oppresses you.

When we lose sight of the bluff on which Rosario stands, the coast of Entre Rios is not visible, while that of Santa Fé gradually declines towards the water's level. Here and there a stray rancho indicates that pastoral avocations are not quite abandoned, in a province which has been reduced almost to destitution by being the theatre of so many wars. At times also we see a small group of horses or horned cattle, which have made their way down one of the fissures caused by rains or inundations to drink the mellifluous water, which possesses many grateful and salubrious qualities. Before long, the islands on our right will have disappeared, and the continuous line of a bold barrier, on either side, shows that the current here is uninterrupted, and consequently runs with tremendous force, the stream being about two miles wide.

On arriving at Paraná the steamer is usually boarded by the agent, Mr. Lorenzo Myers, a veteran Englishman of seventy-seven summers, resident in the River Plate since the year of Independence, 1816. He is a hale, active, old man, and has been an eye-witness of the numberless vicissitudes of the Republic during the last half century. Paraná was the capital of the Argentine Republic during nine years, from the fall of Rosas till the battle of Pavon (September 17, 1861). The Custom-house is at the foot of the «barranca,» and a steep road leads up to the town. First is the Church of San Miguel, commenced fifteen years ago, but abandoned when half built, and now a refuge for all kinds of vermin. There are, however, two good churches in the town, and these are quite enough, as the population does not exceed 8,000. The grand plaza is very pretty, and the buildings on all its sides modern and tasteful. most of them having been constructed under Presidents Urquiza and Derqui. The old Government-house is now ceded to Dr. Fitzsimons for a college. The Legislative Chambers are a fine range, occupying the north side: the President's palace also merits attention. But the sceptre of metropolitan sway is gone. Paraná is now all but deserted, the only signs of vitality being a newspaper and a theatre sometimes visited by strolling players. The club house is, perhaps, the greatest monument of desolation: the ball-room has been cut into two bed-chambers and a kitchen, for a coffee house; the billiard-room and reading saloon are let out to a hair-dresser, and nothing remains of former greatness.

A steamer plies across the river to Santa Fé city, remarkable for its antiquity and many fine churches. A number of islands intervene, completely shutting it out from view.

Leaving Paraná we are forced to make a circuit of a couple of miles, to avoid the bank, which has already nearly closed up the port. The first

object of interest is the saladero built by Messrs. Señorans, with first-class steam-power attached. The main stream washes the banks of Entre Rios, and on our right is a vast archipelago, on whose islands there is little timber, but a strong luxuriant grass, which is sold in Paraná for fodder. There is a marked improvement in the scenery: amid a succession of gentle undulations on the right, the eye wanders over a rich champaign country, presenting much the idea of an English park or demesne. Groups of noble trees, like oaks, break the surface of a verdant vegetation, and Nature has outdone the fancy work of a landscape gardener in the rich variation of tints and foliage, the graceful outlines of hill and vale, the stately forms of pine and algarroba, which every moment present themselves.

Five leagues from Paraná we sight a cluster of ranchos, called «The Spaniards,» the owners of which usually hoist their flag to salute vessels passing by. Behind this little settlement, which is occupied in cutting timber, is the colony of Villa Urquiza, where great efforts were made to plant cotton in 1864. A little further we meet a place where boats usually cross over to Santa Fé, taking horses in tow. These animals swim much better than in Europe, and it will be remembered that Urquiza has several times passed at the Diamante an army of cavalry, for which Hannibal would have required rafts or bridges. Diamante is some leagues below Paraná, and is now deserted.

Two hours' sail beyond Villa Urquiza brings us to a place called Conchillas, where we perceive an estancia-house almost surrounded by trees. Next appears a lonely hut, commanding a grand view from the barranca, and the adjuncts of a cattle corral and small port show that animals are here embarked for the saladeros.

At Cerrito was the fine estancia of an Englishman, the late Mr. Henry Vidal. Here it was that during the campaign of Paz and Lavalle against Rosas, the Correntino army, under General Ferré, abandoned the liberating cause, and returned by land to Corrientes, owing to local dissensions in that province. The cliffs again approach the water; but instead of sand or tosca we have argillaceous deposits of red and purple colors, which are said to be very valuable for dyes, although not turned to use, as no one seems to interest himself in the speculation. Happily, there is no jealous guardian of woods and forests, and several small skiffs in yonder island are loading timber, which is had for the cutting. These wood-cutters are Italians, who trade with Buenos Ayres, and the Genoese may be said to monopolise the small traffic of this river. The river now breaks into a variety of channels, and the pilot has sometimes to take soundings. We cannot see the Gran Chaco, from which we are separated by numerous

islands, teeming with tigers and small crocodiles; the latter are called caymans, and resemble what naturalists term the 'iguana.' Times have changed wonderfully since twenty years ago, when the voyage from Buenos Ayres to Paraguay occupied half a year. The Italians first introduced an improvement, making two or three trips annually, and the introduction of steamers soon reduced the voyage to a few days. Still, the windings of the river, frequency of sandbanks, and force of the current, call for the most constant attention, and going «aguas arriba» is rather tedious for those who are not admirers of the beautiful and picturesque. Tradition says that the first Spanish expedition to Paraguay passed more than twelve months in exploring the long and tortuous course of the Paraná, for although the direct distance is only 1,000 miles, the way is rendered very much longer by the necessity of crossing and re-crossing from one side to the other. Certainly the adventurous settlers of the sixteenth century were men of surpassing energy and perseverance. It is impossible for us to form an idea of the hardships and dangers they must have gone through, penetrating to the very centre of the Continent to establish a metropolis amid the woods and wilds of an unknown country. Such as they then looked upon these cliffs and islands they are to-day, for Nature, in her simplest and rudest garb, still holds undisputed sway in these silent regions.

For thousands of ages this mighty river has flowed on to the sea, and yet it is exactly the same as when first Creation dawned upon the universe. The arts or science of man are nowhere visible for hundreds of miles, and the various layers of soil forming the islands only show that during numberless generations the stream has continued to carry down its deposits till they have risen above the surrounding flood, decked out in all the charms of tropical Nature, with trees of various kinds, most of them, probably, yet unknown to botanists. A thick jungle of marshy grass and entangled underwood, which almost defies the entrance of man, affords a secure and favorite asylum for tigers, serpents, and alligators, except when the current rises to the tops of the trees, and a broad sheet of water stretches from either mainland to the opposite side. Then may be seen the tigers swimming across, with powerful strokes, perfectly heedless of and unmoved by the rapid whirlpools. In many places the casual groupings of foliage, broken here and there by lovely rivulets which tempt you to follow their mysterious recesses, present a picture such as Salvator Rosa or Claude Lorrain never saw even in fancy. It is a pity to think that these islands are never to be turned to any purpose or defended against the torrent, for the soil is so loose that it will hold no structure. The bed of

the stream has changed often, and some towns erected on its banks are now almost inaccessible, so many islands intervene.

About twelve hours' sail from Paraná is La Paz, near the borders of Corrientes: the town is a poor place, but some leagues inland is a fine estancia belonging to Mr. Haycroft, and managed by Dr. Gibbings. Leaving La Paz, we have the same general features already described. For some distance the river spreads out to an amazing width, the coast being on each side very low, and lined with timber. About twenty-five leagues above La Paz we come to the mouth of the Arroyo Espiuillo, which is the frontier line between Entre Rios and Corrientes. On Captain Page's map it is marked Sarandi or Guayquiraro, which falls into the former: it is not navigable. Again there is a number of these delightful islands, revelling in all the beauty of tropical vegetation, with palmetto trees, and a plant bearing golden leaves, easily mistaken for oranges. But what do we see on the margin of the Gran Chaco, in yonder island? Some huts of palm trees, scarce large enough to hold a man at full length. They are the abode of some daring wood-cutters, undeterred by the tigers, which swarm hereabout, or the distance from any trace of human life. The savages of the Chaco never come down here, as they have plenty of means to pursue their occupations of hunting, fishing, or wood-cutting on the mainland. Every few minutes we cross the river, which is here about a mile wide, and very shallow. The coast of Corrientes is low, but well wooded, and yonder is a little hut, elevated on poles, and with a tile roof, which answers as the Capitania del Puerto for Esquina, this town being half a league distant on the mainland.

Esquina is a well-built town, of 1,200 to 1,500 inhabitants, situate on an eminence at a bend of the River Corrientes, near its confluence with the Paraná. It possesses a good church, public schools, juzgado, and other edifices, extending along the crest of the hill for about a mile, most of the houses having azoteas, with wide verandahs for shelter against the rays of an almost tropical sun. The surrounding country is, remarkable for its excellent pasture, and the inhabitants are wealthy cattle-breeders, sheep being comparatively few. Mr. Hayes, the son of an American, is the only foreign resident in the town. In the year 1838 Mr. Hayes's father killed a serpent which measured twelve feet in length and fifteen inches in circumference, and, on opening the monster, three hens, seemingly uninjured, were found in its stomach: he sent the skin to the United States, where it was stuffed, and is still to be seen. The bite of these reptiles is not fatal. There is an abundance of tigers about here, and some years ago a washer-woman was devoured near the river. The Custom-house, or Aduana, is

a small wooden hut elevated on poles, ten feet above the stream, in an island half a league distant from the town. Vessels call so rarely that sometimes no officials visit the place for several days. It happened some time back that a priest was left here by the Paraguay steamer, and being unable to thread his way through the thickets and cross the rivulets, he resolved to pass the night here: some hungry tigers prowling about smelled human flesh, and sacrilegiously resolved to make a meal of him. The priest taking alarm scrambled up on the roof, and sat on the tiles until daybreak. As there was no steamer expected to arrive, the usual passenger boat did not come down the 'arroyo,' and one of the wild beasts kept watch below, thinking the stranger might be driven by hunger to run the gauntlet and make towards town. In this manner the poor priest passed two awful days and nights before he was relieved from his perilous post. The Gran Chaco continues on our left, in its savage grandeur, and the scenery is much the same as we have passed, except that the thickets have grown into forests, the trees lifting their massive branches to a great height: they are mostly very straight and covered with a dark green or light brown foliage. At intervals the sandy beach is strewn with withered and uprooted trunks, highly useful for shipbuilding.

Six leagues above Esquina we pass Costa Tala, where the stream attains an enormous width. Carpinchos or sea hogs now show themselves on the river-bank, disporting in the grass. Higher up on our left, a short distance inland, are the ruins of two Jesuit missions, Concepcion and S. Jeronimo, the second near a stream called Arroyo del Rey.

By daybreak we are in sight of Goya, where a hut stands on the edge of an island, acting both as Custom-house and landing place for passengers. About the commencement of the present century, the site now occupied by the town of Goya was a cattle farm occupied by a Portuguese whose wife was named Gregoria, familiarly contracted into Goya. Here the ships passing used to call for beef, and the position was so favorable that the Government resolved to build a town thereon. Goya is capital of the richest district in the province, and one of the finest towns on the Parana. The houses are of brick, and the population exceeds three thousand, including a large foreign element of Italians, Basques and French. The plaza is very handsome, with a pyramid in the centre, fifty feet high, on one side, and a church not yet finished, of grand dimensions, the cost being estimated at $150,000 s., contributed by local subscription. The chief authority is a Gefe Politico, and there is also a Judge of 1.ª Instancia; There are two priests, and seven doctors: Dr. Newkirk, a Canadian, is in good practice. There are national free schools for both sexes. Most of

the inhabitants are rich estancieros. A public conveyance is hired out, for any part the traveller may wish to repair to. The country is thickly wooded in some parts, orange groves being numerous. There are two English carpenters in Goya; one of them is called Don Pedro, and is one of the oldest inhabitants. There is a Mr. Ramallon, native of Gibraltar. Both of the priests are Italians. The Basques have brick-kilns in the suburbs; and many of the houses are two stories high. The streets are twenty yards wide. The police office is a handsome building. The public cemetery, about a mile distant, is well kept, with some fine monuments, and a handsome chapel. Such is the general prosperity of this industrious town that the citizens of Corrientes jestingly term it «The little Buenos Ayres.» The principal trade of the place consists in hides, wool, cheese, and oranges. Orange groves are frequent, but the business is diminishing, while the excellent cheese is finding its way to the various ports «aguas abajo,» a large quantity being sent to Buenos Ayres. Cotton would grow well here, the climate being warm and dry. Imports are received from Buenos Ayres.

After a couple of leagues we pass a very picturesque locality, known as Rincon de Soto. Here is a large saladero, surrounded by a number of huts, and a fine bay admits vessels of some burthen to come close to the establishment. It was built by Mr. Holterhoff, who bought the site from Government for $150. There is another saladero at work near Goya, belonging to a Mr. Otto. Not far inwards, about two leagues from Goya, is the ancient village of Santa Lucia, on a river of the same name: it was founded by the Jesuits, who built a stone church (the finest in the province) where the few neighbors still attend Divine service. A little further on is the ground marked out for a new town, Pueblo Lavallo, but as yet there is only a solitary house with an orange grove.

We now coast along the mainland of Corrientes, which presents an elevation of perhaps 100 feet. The camps gradually become bare, and the familiar ombú, in lonely grandeur, stands forth, the landmark of the Pampas. We pass the «embouchures» of several rivulets with Indian names, none of which are navigable, although wide as European rivers, with luxuriant vegetation overshadowing their banks. Next comes the estancia of General Ferre, a tract of several leagues, which was granted to him many years ago on condition of planting it with coffee: he tried and failed, and then turned it into a cattle farm.

The red sandstone bluff now ahead of us is a place called Las Cuevas, where the river at low tide is hardly a hundred yards wide. The Paraguayans erected a battery here in 1865, which inflicted serious injury on

the Brazilian ironclads in forcing the pass. Here, in the year 1825, before the neighbouring town of Bella Vista was formed, lived in utter solitude a Portuguese estanciero named Cueva, whose cattle tempted the rapacity of the Chaco Indians. A band of these deadly savages, on two occasions, swam across the narrow pass and attacked his house. The fearless old man and his son gave the Indians a galling reception from a skylight and window, through which they fired as fast as the daughters could load the blunderbusses, and thus succeeded in driving them off. During forty-three years they have never ventured another foray: the house and olive grove are distinctly seen from the river, crowning a headland, on doubling which we have Bella Vista in the distance. And well does Bella Vista merit its name, for the next hour's sail is one of the most delightful that can be imagined. A chain of steep cliffs, cut by the torrent, is broken at short and regular distances by numberless fissures caused by the rains. Yonder is the orange grove of Mr. Henry Hall, with its dark green outline against the horizon, and, as we approach, the files of trees are clearly discernible.

Bella Vista, seated on a gentle slope, in the midst of tropical foliage, is a most charming picture. It was first peopled by a settlement of convicts, sent hither under General Ferre in 1826. It now contains about 1,000 inhabitants, having some azotea houses, a plaza, &c. Nestling in orange groves and palm trees are several small huts, thrown as if by chance on the hill-side, and commanding a grand view of the Paraná and Gran Chaco. The natives may not have inherited the propensities of their forefathers, but, certes, they are wild-looking fellows. Bella Vista is eighteen leagues above Goya. We see, a little above the town, the scene of an attempted cotton plantation, started here by some enterprising Americans in 1853. Whether owing to a bad selection of soil, or mismanagement on the part of the mayordomo, the undertaking failed and was abandoned. A native family now resides there, who pulled up all the cotton to substitute oranges. We have to return two leagues to get the channel, and glide by the Gran Chaco. Now again islands, on which we can see carpinchos. We are now 800 miles from Buenos Ayres, in the heart of South American wilds. The river is still a majestic flood, two miles wide.

Passing Empedrado, which is half-way between Bella Vista and Corrientes, we reach the mouth of the Riachuelo, famous for the great naval battle fought here on 11th June, 1865, between the fleets of Paraguay and Brazil. The former was much less than the latter in ships and weight of metal, but was aided by a shore battery of forty guns. The struggle lasted from daybreak till nightfall, and ended in the utter defeat of the

Paraguayans, who, however, displayed great bravery: over 2,000 men perished in the battle, the Paraguayans losing four steamers and the Brazilians having three vessels *hors de combat*. The vicinity of the Riachuelo is said to produce good tobacco; and now we come abreast of Don Domingo Latorre's famous quinta, with its 5,000 orange trees, and picturesque «montes» of cypress, poplar, &c. This is distant from the capital five leagues by land, but the windings of the river make it seven. Nearer to Corrientes is the quinta of the late ex-President Derqui, finely situated on the river bank. At this place the Chaco looms in the distance, with its dark fringe of impenetrable forests. Very little of Corrientes can be seen before landing, or passing «aguas arriba.»

Corrientes covers a plateau elevated sixty feet over the water level, so that we can see little but the church-towers and the few irregular edifices situate on the slope. On the extreme right is a graceful country-house, belonging to Dr. Vidal: a large shrubbery leads up to the door, and a corridor all around the house has an effect of comfort and elegance. The line of beach is studded with dusky washerwomen, perfectly regardless of the fact that the thermometer stands over ninety in the shade. There are scattered fragments of a dark stone, said to be very good for building, though not much used; it looks like tosca, but is hard as granite. Beyond Vidal's quinta is a saladero, the present owner of which is a Correntino. A tanning establishment and timber yard form the centre of our picture, with the Custom-house, Casa de Gobierno, several palm ranchos, and a sprinkling of orange trees to fill up the whole, giving a strange and not unpleasant aspect. Most of the houses have corridors, which cover in the whole footpath, the windows being barred as in Buenos Ayres. No block can be called complete, for palm ranchos and orange gardens alternate with tile roofs and azoteas. The streets are about fifty feet wide. The plaza is much the same as it was three centuries ago: on the north side is the Matriz or principal church, an old edifice eighty yards long, with a tile roof, and at a short distance a bell tower, seventy feet high, in which is the town clock. The west side contains the Cabildo, where the law courts and prison are guarded by a bare-footed picquet of Federal troops of the Line. In front are two antique houses, one of two stories, and the Merced Church, not yet whitewashed, with two belfrys, and a cloister attached for Franciscan friars. The house of Señor Pampin, ex-Governor, with a few others of less note, make up the south side, and a column some sixty feet high stands in the centre of a multitude of weeds, around which are wooden posts but no seats: the column is surmounted by a diminutive female armed with a lance, and bears the inscriptions, 25 de Mayo 1810, and 9 de Julio 1816.

On the pedestal are the busts of four generals. The Cabildo is a handsome structure, two stories with arches, supporting a square tower of Moorish build, which commands a view of the country around. At the Hotel Globo we can procure a clean, airy apartment wherein to take «siesta.» The windows are of stained glass, with Venetian blinds. The *cuisine* is faultless for those who are not squeamish about garlic. The city forms a parallelogram of sixty or seventy cuadras, but is wholly different from anything European. There are about 1,500 palm ranchos, 200 tile roofs, and 100 azoteas of one or two stories; also, four steeples, three miradores, six flagstaffs, a few slender palms, and an infinity of orange trees, amid which the houses seem to nestle for protection from the sun. Corrientes is distant 270 leagues, or 900 English miles, from Buenos Ayres.

On leaving Corrientes we can distinctly count the seven currents, which give the city its name; they are formed by as many projecting points of land, above a place called La Bateria, a little north of the town. We now approach the Tres Bocas, the confluence of the rivers Paraguay and Upper Paraná. The scenery about here is very fine. The Paraná turns off at a right angle, eastward, and is navigable for steamers as high as the island and falls of Apipé. At the Paso la Patria is a ferry for carrying over cattle into Paraguay, and the woods on the Corrientes shore were the scene of some hard fighting in January 1866. Nearly opposite stood the Paraguayan fort of Itapiru, which formerly commanded the navigation of these waters: it was destroyed by the Brazilians in April 1866. Higher up on the Corrientes bank are the villages of San Cosmo, Itati, San Antonio, and Loreto; near this last is a ford called Tranquera de Loreto. On the Paraguayan shore the ground is low, marshy, and uninhabited. At Itapua the river gives another bend, almost due north, and this is the point where the Paraguayans invaded Misiones, in May 1865, previous to their descent on Rio Grande. Opposite to Itapua is the Paraguayan station called Candelaria. The Paraná may still be ascended in small boats as high as the great cataract of Salto de Guayra; but this part of the country is comparatively unexplored. The ruins of a town called Ciudad Real are still seen near the falls: from this point to the Tres Bocas is a distance of about 500 miles.

Entering the Paraguay river at the Tres Bocas, we pass the Guardia Cerrito, where the Paraguayans had a battery, and in a few hours we reach Curupaity, where the Allies sustained a great reverse on the 22nd of September 1866. Every inch of ground was here disputed with immense sacrifice of life during more than two years, till the Paraguayans finally abandoned Humayta in July 1868. A bend of the river reveals to us this formidable position, which was defended by casemated batteries, torpedoes,

and chains across the river. This place was the key to the upper rivers, and the garrison, before the war, usually numbered 12,000 men: the fortress was constructed by French engineers in 1854, under the regime of the first Lopez.

A little above Humaitá, on the Chaco side, we come to the mouth of the Rio Vermejo, which is about 300 yards wide, and bordered by a dense thicket. Some of the Chaco Indians may often be seen about here, spearing fish.

Villa Pilar is a pretty little town, with numerous orange-groves and a handsome church, about a mile from the shore. It is the chief town of a district which shewed a census-return of 160,000 inhabitants. Under the rule of Francia it was the commercial emporium of Paraguay, the city of Asuncion being shut to all foreigners.

An hour's sail takes us to the mouth of the Tebicuari, a large river which rises in the Yerbales or *maté*-fields of Misiones, and after a course of 400 miles falls into the Paraguay at this place. Just before the war President Lopez had sent to Europe for two light steamers to navigate the Tebiquary.

Villa Franca is a village of no importance: the surrounding district has only 10,000 inhabitants.

Villa Oliva is another small place, with a church and public schools: here the steamers often take beef and firewood. And now we may observe shoals of alligators on either bank: sometimes as many as a dozen basking together in the sun, a few measuring seven or eight feet in length. They lie motionless, like a log of wood, with their jaws extended shewing two alarming rows of teeth. The body is scaly like a tortoise, with four short fin-like legs, and they glide into the water with great ease. Carpiuchos may be seen in close proximity, apparently on good terms with the «Yacares,» for this South American crocodile confines his tastes to fish.

Villeta is a difficult pass of the river, about seven leagues below Asuncion. At times the water is so low that no vessels drawing over eighteen inches can pass. The banks on the Paraguayan side rise as we proceed up stream, and the Paraguayans used to have a battery of a few guns commanding a bend of the river. The scenery is very diversified and tranquil, with stately palm-trees that stand forth at intervals to remind us of the tropics.

The peak of Lambaré is enchanting, with its cone-like elevation clad in luxuriant foliage, raising its lofty form to the clouds. The adjacent village

of Lambaré is a suburb to the capital, remarkable for its church and cemetery.

On the left bank is the mouth of the Pilcomayo, which rises in Bolivia, near the city of Chuquisaca, traverses the Gran Chaco, and after a course of 1,500 miles, here falls into the Paraguay.

There are two batteries at the turn before we get view of the arsenal and city of Asuncion.

Asuncion, the Paraguayan metropolis, is a town of some 30,000 inhabitants; it was founded by a Spanish captain named Ayolas, on August 15, 1536. There are some splendid public buildings, and excellent hotel accommodation is found at the Club. The shops are poor, and all imported articles very dear. The railway to Villa Rica runs through a country unsurpassed for scenery. The traveller will find many delightful rides in the environs of Asuncion, and he should take a bath before sunrise at the Chorro. A description of the city and people will be given at full in the section of this work devoted to Paraguay.

Ascending the river to Matto Grosso, the first place beyond Asuncion is Villa Occidental, on the Chaco side, where a French colony was established by Lopez, but resulted unfortunately. We next pass the towns of Rosario and San Pedro, and the mouths of the Confuso, Jejuy, and Ypape rivers, arriving at Concepcion, 180 miles from Asuncion. The depth of the river varies from twenty to seventy feet, its width being from half a mile to a mile, and the banks usually about fifteen feet high. Concepcion is a town of 2,000 inhabitants, and the great port of the yerba-máte trade.

Salvador is seventy miles above Concepcion, and has a population of 1,000 souls. From Salvador to Rio Appa is nearly 100 miles, the scenery being very beautiful near the ranges of Itapucu Guazú, and the country inhabited by warlike Indians. Here begins the disputed territory, which extends eighty miles north, as far as Rio Blanco, and is claimed by both Brazil and Paraguay on account of the important position of Fort Olympo.

Fort Olympo is 420 miles above Asuncion, standing 45 feet above the river, which is here 600 yards wide: it forms a square of 100 feet, with bastions for cannon, the walls being fourteen feet high and two and a-half thick, without embrasures. It was built by the Spaniards in 1798, garrisoned by Francia in 1822, abandoned by Lopez in 1850, again occupied in 1856, and afterwards seized in turns by Brazil and Paraguay. Before reaching Olympo is the picturesque mountain called Pan-de-azucar, and five miles above the fort is Bahia Blanca, at the mouth of the Rio Blanco.

We enter Brazilian territory at Salinas, and here the left bank is claimed by Bolivia, while the right forms part of the province of Matto Grosso.

Fort Coimbra, in Lat. 19.55.43, and Long. 57.52.32, stands on a hill of the same name, which slopes to the river: it is forty feet above the water level, and is a solid stone structure, completely commanding the river which is here 600 yards wide. The officers' quarters within the fort consist of small stone houses. All supplies are obtained from Albuquerque or the neighbouring Indians. The low lands for some distance above Coimbra are subject to inundation, but there are also some pieces of firm land, covered with excellent woods and never overflowed except in seasons of extraordinary rise. The mountains are still insulated peaks or short ranges, probably spurs of the Bolivian sierras. The surrounding country is held by the Guaycurú Indians, whom the Brazilian Government treats with much conciliation. Coimbra is thirty-three miles above Fort Olympo.

Albuquerque is an insignificant village of seventy houses, only useful for supplies of provisions, and 47 miles from Coimbra. Passing the mouth of the Tacuari we reach Corumbá, sixty miles from Albuquerque, and 560 from Asuncion. This place sprung into importance with the introduction of steam traffic: it produces some good cotton.

From Curumbá to Cuyabá is nearly 400 miles, the course changing in Lat. 18, Long. 57.30, from the upper Paraguay to the river Cuyabá. The city of Cuyabá is capital of the province of Matto Grosso, residence of the President, Bishop, and other Brazilian functionaries, and a place of much importance. This is the highest point navigable in a steamer. Captain Bossi, in 1862, attempted to cross over to the head-waters of the Amazonas, but failed. The distance overland to Rio Janeyro is 1200 miles, practicable on mules in about sixty days, but much infested by Indians, passing through a country of woods and mountains. The early Spaniards are known to have made the journey. A Brazilian expeditionary force left Rio Janeyro in 1865; most of the men perished on the route, the rest deserted to the woods.

UP THE URUGUAY.

The scenery of the Uruguay is the finest in these countries, and there is almost daily communication between Buenos Ayres and Salto: the steamers are elegant and commodious, and make the trip in 36 hours.

As we cross the La Plata to ascend the Uruguay, the fine estancias of Martin Chico and San Juan are pointed out to the traveller; they are beautifully situated, and must some day become immensely valuable. Passing the Cerro San Juan we sight the island of Martin Garcia, the Gibraltar of the River Plate, which has anything but an imposing appearance. Two new fortifications are seen on the S. E. point, but there

are no guns on them. Facing the Argentine coast is a battery of nine guns, with soldiers' quarters. The place almost looks deserted, and the old batteries used in the war of 1859 are dismantled. Between the island and the Oriental coast only small craft can pass. The Argentine Congress in 1867 voted a considerable sum for the fortification of the island. In the time of Rosas many of the prisoners confined here escaped by swimming a grey mare over to the mainland of Banda Oriental, the mare regularly swimming back again, till Rosas took her and shot her as an enemy to the State.

Carmelo is the first town we sight and looks very pretty, seated on a bend of the river, but a good view is not obtained till we pass upwards. A small steamer calls here in connection with Colonia or Higueritas. The next thing we see is an old convent now used for an estancia-house.

The scenery improves as we advance, the Entre-Riano coast being much lower than the Oriental.

Nueva Palmira or Higueritas is on the eastern bank; it is a small place, and has few attractions, except that it offers a convenient landing-place for passengers for the interior. There is a 'graseria,' for melting down sheep, belonging to Mr. Henry Zimmermann.

At the mouth of the Rio Negro the scenery is interesting: here a small steamer meets us to take the passengers for Mercedes. Higher up we meet the Gualeguaychú steamer, forming another branch-line of the Uruguay service.

As we proceed up the river the nature of the last great geological changes, that have occurred in this valley, becomes apparent from the facts noticeable. The Argentine side of the river is generally low, often marshy, as if recently redeemed from a deep lake, while the Uruguayan side is generally high and rocky. Along the bold rocky border of that old, immense lake, the waters were drained, and, washing the base of the bluff on its eastern border, at length formed the River Uruguay. On the Uruguayan shore the bed of the river is generally of granitic rocks, the channel is deeper, and, from the more solid formation, the ports are better. The rocks are chiefly granite, though in some parts, as for example near Salto, the action of the fire is more marked, and quartz is seen under all the modification made upon it by heating and cooling, and by slight admixtures of other rocks. In the interior of the country, 'geodes' are found in great abundance and of great beauty of structure. In the streams and along the rocky coasts, the sand is richly interspersed with pebbles of cornelian, agate, chalcedony, onyx, and jasper, all more or less pure, and some of them of great beauty. There is, probably, but one place

where such pebbles are so abundant, or so beautiful, or so large, and that is at St. Anthony on the Mississippi river.

Fray Bentos is a new town on the same side of the river, containing about 1,000 inhabitants. It is called sixty leagues from Buenos Ayres: it is not attractive to the traveller, who only beholds it from the deck of the steamer, but is said to be a place of considerable business. It is chiefly noteworthy for the famous Liebig Extractum Carnis Factory, under the direction of Mr. Giebert, which was established in 1861, at a cost of £200,000. It gives constant employment to 600 or 800 persons, and can kill 500 head of cattle per day. The machinery was made in Glasgow, and cost £45,000: it is the most complete and elaborate that can be imagined. The beef extract is made up in boxes of 100℔ each, for shipment to Europe, where it is sold at £1 sterling per ℔ weight, chiefly for hospital use.

Roman is the name of a landing place, and also of a saladero near it, about seventy leagues from Buenos Ayres. The saladero is owned by Don Felipe Iglesias, and the town is little else than a group of irregularly built houses to accommodate the workmen.

It is usually midnight when the steamer calls at Concepcion, the chief town of Entre Rios, which we shall visit on our return down the river. By daybreak we are at anchor in the port of Paysandú.

Paysandú, eighty leagues from Buenos Ayres, contained before the civil war in that country 7,700 inhabitants. So great has been the activity of business, since the restoration of peace, that it is believed that the population now exceeds 10,000. New houses are going up in all directions, and these are of a better class than the old ranchos battered down in the bombardment. In the Department of Paysandú are five saladeros, two of these are in the city, one at Casa Blanca, one at Roman, and one at Fray Bentos. At each of these there are killed annually 40,000 to 50,000 animals, making from this department 200,000 to 250,000 animals in the year. The beef is salted and dried in thin, large slices, and it finds a market in Brazil and the West Indies. Hides are salted and go to Europe, chiefly to Antwerp and Liverpool, and the tallow goes by cargoes, in pipes, to England. There are no manufactories in Paysandú but sundry stores, and shops of shoemakers, tailors, waggon-makers, blacksmiths, &c. Hotels, La Paz and La Francia; charge, $1½ per day. Labor is dear both for house and farm service, the poorest laborer receiving, at the lowest, $10s. per month. And so rapid is the increase of population by immigration that all kinds of marketing are as dear as at Buenos Ayres. Don Miguel Horta, the principal shopkeeper, is Spanish vice-consul, and his house is the

rendezvous of all English estancieros. Some pleasant excursions may be made to the neighboring estancias of Col. Mundell, Plowes, Hughes, Green, and Bell, to the saladero at Arroyo Negro, to Messrs. Paris and Sloper's beef-packing establishment, to William's saladero, and by boat to the Swiss colony across the Uruguay.

From Paysandú to Salto is the finest part of the river: the scenery is varied and beautiful. A league above the town is Mr. William's saladero, where they tried «the Morgan system,» in 1866, with beef and mutton. At the Hervidero we pass a large establishment belonging to Mr. Richard Hughes, with the Union Jack flying from the battlements: it is a two-story house built over twenty years ago by a Company, of which Mr. Lafone formed part, and had a saladero, now in ruins, and an estancia with over 100,000 cows and sheep. The Mesa de Artigas is a bold headland just over the river. Here General Artigas encamped his army in the War of Independence, and tradition says he threw his Spanish prisoners hence, sewed up in hides, into the river. After passing the estancia Delicias and other valuable establishments belonging to foreigners, we reach the dangerous pass of Corralitos. This reef or archipelago of rocks has but one narrow and tortuous channel, and is impassable by night. Sailing vessels cannot pass but with the most favorable wind, and we see coasting craft at anchor in front of the old port of Concordia, which is nearly a league below that town. In high water the Corralitos are covered, but often the river is so low that the buoys are high and dry. You cannot see Concordia from here, but there is a «casilla» at the new port, and coaches are in waiting to convey passengers to the town. We have now a fine view of Salto at the head of the river, about three miles above, covering three or four hills, with large white edifices, and apparently a town of great extent.

Salto (Hotel Concordia) is 110 leagues from Buenos Ayres: it is a very flourishing place, with 9,000 inhabitants, one half of whom are Italians.

The town has a bustling aspect, new buildings going up on all sides. The view is very picturesque in every direction. The city stretches out much to the north, the new town laid out by Mr. Coleman being already thickly settled. The situation is charming, the Uruguay bathing the declivities of the 'cuchillas' which run down in almost parallel lines, the white buildings studding the hill-sides, and clumps of brushwood fringing the outskirts. It is the headquarters of all frontier traffic to Rio Grande and Corrientes, and the Brazilian Government is in treaty with a London firm for a railway to Uruguayana and San Borja. The Salto Chico is about a mile above the town, and sometimes quite dry: the Salto Grande

higher up is a barrier to navigation in almost all periods. On the east side of the Plaza is the church, an unpretending structure with two towers, one of which has a town-clock (the weights are of sand): inside, it is quite bare, and can hardly hold 800 persons. Next door is the Curia, a fine house with ornamental front. On the south side stands the Comandancia, imitation of Grecian architecture, and a few yards off is the Imprenta, from which issues, twice a week, the *Eco de los Libres*. Some of the public works are a decided failure, viz., the wharf of granite which has already cost 60,000 hard dollars, and can never be of use except in extraordinary high tides, whereas an iron mole might have been run out into the river at a cost of 40,000. A little below the town is a tan yard, and further down was the Brazilian encampment in 1865. Salto is reputed a very healthy place, the only epidemic ever known being small-pox. The water here, as in all other parts of the Uruguay, has a mellifluous taste. Mr. Richard Williams, one of the oldest British residents in the River Plate, has a handsome residence, commanding a view of the Uruguay, and Concordia on the opposite bank. He has a fine collection of pebbles and crystallizations: these stones come from the Cerro de Catalanes near the river Cuareim, where agate is found in abundance, and some collections have been sent to England, and appreciated by lapidaries. A German explorer with a number of workmen collected quite a cargo, but died when about to return to Europe. There are not many English estancias, excepting those of Mr. Williams, near Salto.

In times of very high water, a steamer (drawing three feet) goes up the falls to Uruguayana: the distance is about 150 miles, and the scenery well repays the journey.

After passing the falls we coast alternately the shores of Entre Rios and Banda Oriental, on both of which there are many large cattle estancias. Some leagues above Concordia is the Arroyo Yuqueri, where Gen. Mitre established his headquarters when the Paraguayan war first broke out. A range of hills called Puntas de Mandisobi, twelve leagues from Concordia, was subsequently Gen. Flores's rendezvous before the battle of Yatay. Not far hence is the village of Federacion, and nearly opposite, in Banda Oriental, is another, called Constitucion.

A stream debouching on our left, called the Mocoretá, is the frontier line between Entre Rios and Corrientes; and ten leagues higher, on the right, we come to Santa Rosa, at the frontier of the Brazilian province of Rio Grande: this place is thirty leagues above Salto, and has vis-a-vis the Correntino village of Monte-Caseros.

Twenty leagues further is the important town of Uruguayana, at a pass

of the river, called Paso de los Libres. A line of diligences formerly ran from this place to Concordia, and another on the Brazilian side, from Uruguayana to Salto. At present railways are projected, one on each side of the river, as the falls at Salto are a bar to all commerce by water.

Uruguayana was founded in 1843, and was a thriving frontier town previous to the war; it had about 10,000 inhabitants: it was the centre of the trade of this part of Rio Grande. In 1865 the Paraguayans took it and held it for some time, till the allied generals closely invested the place, and the Paraguayan commander surrendered to Dom Pedro in person. The town was found to be in a dreadful condition; but it is now fast recovering its prosperity. The Uruguay is here half-a-mile across.

Twenty leagues higher up is the Correntino village of La Cruz, and two leagues further, on the Brazilian shore, stands the town of Itaqui, which was also taken by the Paraguayans in their descent on Rio Grande. A battle occurred near a rapid river above the town, in which the Brazilians were worsted, obliging them to abandon Itaqui.

Twenty-five leagues further on, are the towns of Santo Tomé and San Borja. The former is in Lat. 28.20, and Long. 58.10.: it is the chief town of the Misiones of Aguapey (Corrientes). Exactly opposite is San Borja (Rio Grande): the country around is rich and populous. The distance across Misiones, to Itapua on the Upper Paraná, is 38 leagues.

We have now ascended 100 leagues from Salto, and the traveller may still continue his explorations in Misiones. The return voyage from San Borja to Salto will occupy a day and a-half.

If we cross the Uruguay river below the falls from the eastern to the western side, we shall find Concordia, an Argentine city of the province of Entre Rios, and nearly opposite Salto. The present war, during the months when Concordia was the headquarters of the army, added greatly to the business and wealth of the city. There is at Concordia one saladero which uses about 50,000 animals in the 'faena' (cattle and horses). This is the property of A. Benites and Co.: the city counts about 5,000 inhabitants, and is a place of considerable business. Rents and wages are high, and good houses are not easily found to rent.

Colonia de San José, twenty-four leagues below Concordia, is a colony of Swiss and German immigrants, numbering about 2,500 persons. The town itself is only the few houses needed at the landing, for the people are agriculturists, raising wheat, maize, potatoes, &c.

Concepcion del Uruguay, nine leagues lower down the river, is at present the capital of the province of Entre Rios. The anchorage of steamers is near the shore, but the landing is so far away from the city as

to leave but little opportunity to see the town from the steamer. There are said to be 5,000 inhabitants. The princely residence of General Urquiza is seven leagues distant, at San José. At Concepcion are two saladeros, but there are no manufactories.

The possessions of General Urquiza are immense. One-third part of the land of the province is called his. From the River Gualeguaychú to Victoria, eighty leagues, you may not go off the lands of the Captain General. The annual product from so much land, stocked with cattle, horses, and sheep, must be very great.

THE SALADO AND VERMEJO.

These two rivers belong to the Gran Chaco territory, and are generally considered navigable, although many obstacles have been met with in the expeditions sent for their exploration.

The Rio Salado rises in the upper provinces, passes through Santiago del Estero, and falls into the Paraná just above Santa Fé city. A Spanish gentleman named Esteban Rams Rupert devoted many years and a large amount of money to the scheme of canalising this river. His first expedition was at the close of 1862, and he narrates it in these words—

«We left the Colony of Esperanza on the 31st December, in the direction of Concepcion del Tio, in the Province of Cordova: from this point we followed the road called De las Tropas, due north, until arriving at the town of Salavina, in Santiago. Then, striking out east, we reached Fort Bracho, on the banks of the Salado, on the 19th January. The engineer at once began his survey of the river, from Navicha to the Boca de Matará, which, along with the marshes, covers a superficies fifteen leagues in length by three or four in breadth. This is the only part of the river requiring heavy works to make the navigation clear, to Sepulturas. The engineer's reports, confirming and amplifying previous ones, are already nearly complete. The annual rise this time came as high as the Boca de Matará, on the night of the 30th December, and when I arrived at Matará, on the 23rd January, I found the river in front of this place fifteen feet deep for a width of eighty-two feet. I left a meter there, in charge of the commander, and on my return on the 4th of February found that the water had, in the interval, suffered a maximum rise of four inches, and fall of four and a-half inches, making thus a difference of half an inch in twelve days, and its actual depth being fifteen feet and nine inches. This shows there is plenty of water to navigate the Salado, the sole difficulty being to run a canal from Boca de Matará to Navicha, a distance of fifteen leagues, as there is not the least obstacle between Navicha and Santa Fé. The

levels taken prove the possibility, nay, the facility, of avoiding the marshes, and conveying the whole current down to Navicha.»

Baron Mauá provided funds, pending the formation of a company in England, and Mr. W. H. Cock began the works in 1863. The Baron, however, found it impossible to get up the company, owing to the Flores revolution of April 1864, and, after a year (December 1864), Mr. Cock received orders to suspend operations: his report on the works is as follows:—

«The Cauce Viejo (old bed), whose course was hardly known before my arrival here, owing to its frequent windings through impenetrable thickets, is now quite cleared of trees from Bracho Viejo (La Fragua) as far as two leagues beyond Navicha, a distance of fifteen leagues, now rendered quite navigable, all the old roots and trees being completely removed. The rest only requires a few workmen, for a couple of months, to render it fit for navigation, by burning the trunks and boughs felled on the banks, which are now so dry as easily to ignite. Beyond Navicha (except two leagues, which I have already said are clear) there is little wanting to be done, and with the staff of navvies under my orders I could have finished it by the end of February—so that the Rio Salado would have possessed a continuous canal free from all obstacles, and requiring no further works, to permit the passage of a small steamer as high up as Bracho Viejo. A little canal, eighteen feet wide (six and a-half varas) has also been opened from the Lagunas del Bracho to the bed of the river, with the view of giving the river an additional flow of water, and draining the marshes so as to be enabled to commence the canalization works across the Estero del Bracho some months earlier than usual. During my stay in this place I have devoted all my attention to a careful study of the various projects feasible for making a canal through the Estero del Bracho to the Boca de Matará: my assistant Mr. Charles Albeck has also been busy in taking levels and drawing plans for the same purpose. I now possess all the necessary *data* for this important section of the works, so as on finishing the plans, to be able to point out the best and most economical route for the canal.»

But Mr. Rams never despaired: he contrived to carry on the work in a small way, and in July 1865 he obtained from Congress a renewal of his concession, for three years longer, to date from December 31, 1866. The Government was to establish a port at any suitable point between Navicha and Bracho, guaranteeing Rams nine per cent. on the outlay of the enterprise, and allowing him an exemption from half-export duties during thirty years.

In March 1866 he obtained a concession from the Santa Fé Government,

for the introduction of 5,000 immigrant families to be settled along the Rio Salado; the Government giving him a square league of land for every four families.

Mr. Rams had some iron lighters built by Marshal of Barracas, and was almost ready to start for the Salado, when he was cut off by cholera, in April 1867. The enterprise, however, was not suffered to fall through, but in the following month Mr. Señorans started from Buenos Ayres.

After a voyage of three months and a-half he returned to Santa Fé with his expedition, having nothing to lament except the death of a young man named Piran. The expedition reached a point some hundred and eighty miles above Monte Aguara, at which latter place the River Salado takes a great bend to the west, just before entering into the province of Santiago del Estero. Mr. Señorans thus examined and went over that part of the river which Captain Page was unable to explore, owing to his steamer drawing too much water. The river, during the whole time occupied by the expedition, was pretty high—sixteen feet of water often being found, so that the theory of the navigation of the Salado by small steamers towing «chatas» was thus fully established, and even if this navigation be only practicable during six or seven months of the year, it is still of the very greatest importance, as it will facilitate the settlement of the lands on either side of the river. Mr. Señorans was successful in gaining the good will of the various tribes of Indians on his route. All the caciques of the river came to visit him, and he made treaties with many of them. The principal cacique, Mariano, was not seen, as he lives a considerable way in the interior, but about a dozen other chiefs presented themselves, accompanied by a vast number of their people. It appears that about Monte Aguará the Indian tribes are much more numerous than it has generally been supposed. Mr. Señorans took with him a large quantity of presents, and distributed them very liberally—clothes being given to almost all. They were very much afflicted to hear that their old friend and 'padrino,' Mr. Rams, was dead. They all asked for his portrait, and brought up children by the score, whom they stated Mr. Rams was god-father to. A good trade can be made with these various tribes of Indians, and it is probable many of them could be made useful in cutting timber.

The expedition reached Fortin Taboada without any difficulty, and might have proceeded further on, but much time had already been expended, and provisions were running short, as they had not calculated on the necessity of furnishing food to the large numbers of Indians who continually accompanied the expedition. The reason of this equivocal guard of honor was probably two-fold—first, curiosity and greed, and secondly,

suspicion of the whites and of their objects. They could not understand why all the people of the steamers invariably attended divine service fully armed. They said that the Padres never did it. There was evidently anything but good will at first, but it appears that Mr. Señorans at last insinuated himself into their confidence, and gained their friendship.

Although plenty of water was always found, the sharp turns of the river impeded the navigation to a large extent. Then the delays of cutting wood, and the conferences with the Indians, caused a vast time to be lost. Once thoroughly established, the navigation, with wood ready cut at stated points, the steamers can run up to Fortin Taboada in six or seven days.

It is stated that the timber on the river is very abundant, and of a valuable quality. The «chatas» returned loaded with various kinds, amongst which are specimens of excellent ebony. Two young Englishmen who accompanied the expedition returned well and hearty.

Mr. Señorans encountered in one place a number of dead men. He buried them decently. It was supposed that they belonged to the Salta contingent that mutinied in the Paraná and fled into the Chaco. As nothing was ever heard of them it is probable they all perished either by hunger or by the Indians.

Since the return of this expedition (September 1867) no other has gone up the Salado, and it may be presumed that no efforts for its further navigation will be made till the termination of the Paraguayan war.

The Rio Vermejo rises in Bolivia, and, after a tortuous course of 1,200 miles through the forests of the Chaco, falls into the River Paraguay near the fortress of Humayta. The first expedition to navigate its waters was in 1826, when some Englishmen and Buenos Ayreans successfully descended the river: they were, however, taken prisoners by Francia, tyrant of Paraguay, and kept in captivity for many years. In 1856, José Maria Arce, a Bolivian, accompanied by an Irish sailor named William Martin, safely descended from Oran to Corrientes. Señor Arce made four voyages afterwards, the last in November 1863, on this occasion losing two men, killed by Indians. He brought 150 tons cargo and 10 passengers, including his brother, Dr. Arce (with two secretaries), who had credentials from the Bolivian Government as Minister Plenipotentiary to the Argentine and Paraguayan cabinets: his principal business being to make treaties for the navigation of the Pilcomayo. President Lopez would not make any treaty on the subject, as he declared the Vermejo and Pilcomayo belonged exclusively to Paraguay. Arce, in his last voyage, found the Vermejo nowhere less than five feet deep, his vessels drawing only twenty-seven inches; but in many places the boughs of trees obstructed the navigation.

In February 1863, Lavarello's expedition started from Buenos Ayres, on board the steamer Gran Chaco. After some delays to repair she at last entered the River Vermejo on April 18th. One of the party writes as follows:—

«Our progress was very slow, for several reasons. We were obliged to stop rather more than half the time for the purpose of cutting and loading wood for fuel. The course of the river changes five or six times every league, so that Captain Lavarello reckons one thousand bends from Esquina Grande to the mouth of the Vermejo. Owing to this tortuous course, and the danger of missing the channel at night, added to the strong currents of the river, and the small power of the engine, we could only navigate by daylight, and came to anchor early every evening. We were soon delayed several days by heavy rains, preventing the crew from cutting wood, and causing nearly all on board, officers and men, to fall sick of a tercian fever or 'chucho,' induced by moisture and exposure. The steamer was converted into a hospital, and from lack of medical knowledge many suffered severely and for several weeks. Of thirty persons on board, more than twenty were sick at once, and we were detained more than twenty days from lack of hands to man the vessel. At last our provisions became exhausted, one article after another, so that we should actually have suffered from hunger, had we not succeeded occasionally in obtaining a sheep, a kid, or a pair of chickens, from the Indians. The Indians also rendered us most essential services by assisting us to cut and load wood, and by hauling us loose, with ropes, when we occasionally became stuck upon sand banks. We saw great numbers of Indians, thirty or forty different bands, in number ranging from ten or twenty up to one hundred.»

At last they reached Rivadavia colony in July, and the expedition returned to Buenos Ayres early in 1864. Just then President Lopez sent to Europe for two small steamers, to navigate the Vermejo and Pilcomayo, but the war soon after ensuing the enterprise was prevented.

At present (November 1868), there is a petition before Congress from Messrs. Lezica and Lanuz, in connection with the Vermejo, which they propose to open to navigation as soon as the war terminates.

CHAP. VIII

ITINERARIES OF THE REPUBLIC.

The highways of the Argentine Republic are pretty much as Nature made them, consisting merely of a beaten track across the Pampas. They were formerly much better as regards post-houses and relays of horses than at present. General Urquiza devoted much attention to this matter; but since the Paraguayan war the Indians have made such frequent incursions that the overland route from Rosario to Chile, or the upper provinces, is attended with much inconvenience, for want of horses at the post-houses along the roads.

In the Province of Buenos Ayres the Northern, Western, and Southern railways offer speedy and commodious transit, in connection with «diligences» ramifying the campaña in all directions. In Entre Rios there is also easy communication by the river steamboats, and a regular line of «diligences.» In Corrientes there is no other way of travelling in the interior but on horseback.

The Central Argentine Railway, from Rosario to Villa Nueva, is the great highway to the upper provinces. At Villa Nueva two main routes strike out north and west; the first goes to Cordoba, Santiago, Tucuman, and Salta; the second to San Luis, Mendoza, and San Juan. The railway from Rosario to Cordoba will be 247 miles long when finished: at present the section open to traffic, to Villa Nueva, is about 170 miles. The first thirty-three miles from Rosario are slightly undulating and destitute of timber, till we approach the English settlement of Frayle Muerto, when the country assumes a wooded aspect, with picturesque park vistas and an abundance of algarroba and other fine trees. The line crosses two rivers; the Carcarañá, about ten leagues from Rosario, and the Tercero, about twenty-three leagues further. (This route will be described at length in the chapter on the Central Argentine Railway).

NORTHERN ROUTE.

The «diligences» from Villa Nueva to Salta traverse a route of 215 leagues, the number of days employed varying, according to the weather, the state of the roads, post-houses, horses, &c. The itinerary is as follows, in Spanish leagues:—

Villa Nueva,	....	3¾	Machani,	....	2½
Tio Pugio, ...	....	4	Alpapuja,	....	2½
Chañares, ...	....	2½	Mano Gasla,	....	2¾
Espinillo, ...	....	2½	Cardoso,	....	3¾
Desgraciado,	....	2½	Santiago,	....	2½
Uncativo, ...	....	5	Bella Vista,	....	2¼
Mendez, ...	....	3	Tipiro,	....	3¾
Moyano, ...	....	2½	Chauchillo,	....	2¼
Rio Segundo,	....	2¼	Sotelitos,	....	3¾
Geromito, ...	....	3	Pozuelos,	....	4¼
Cordoba, ...	....	4	Bagual,	....	2
Bajo del Rosario,	....	3	Tres Pozos,	....	2¾
Guerra, ...	....	1½	Favorina,	....	4¾
Salitre, ...	....	5¼	Tucuman,	....	3½
Tala, ...	....	3¼	Chañar,	....	3¼
Divisadero, ...	....	5½	Ramada,	....	4¼
Qutiquan, ...	....	3¾	Puesto,	....	1¾
Santa Cruz, ...	....	3½	Borriaco,	....	3
San Pedro, ...	....	4	Chilcu,	....	3
Carril, ...	....	2½	Laguna de los Robles,		1½
Piedritas, ...	....	3¼	Ojos de Agua,	....	5½
Pozo del Tigre,	....	4	Cañas,	....	2¼
Portezuela, ...	....	2½	Madriaga,	....	4½
Horquetas, ...	....	2¾	Mojaras,	....	4
Aquila, ...	....	3½	Santas,	....	3
Guardia, ...	....	6¼	Conchas,	....	3¾
Puesto del Monte,	....	3¼	Piedras,	....	6½
Chilue, ...	....	5¾	Pasaje,	....	8
Lago Chaquin Nodri,	....	2	Simbolar,	....	4½
Altamique, ...	....	3½	Ramada,	....	5¾
Cañada, ...	....	3			
Loreto, ...	....	2¼	Salta,	....	215

From Villa Nueva to Cordoba is about seventy-eight miles, through dense forests of «algarroba.» At Chañares there are excellent springs of water,

and a mile further on we reach the magnificent lake of El Aguada. About two miles from here are the well-known springs of Ojo de Agua. For several leagues the lands are now very inferior, owing to the abundance of «biscachos,» which have burrowed about in all directions. The Rio Segundo is a river 250 yards wide, from one «barranca» to the other; but in dry seasons the stream is only thirty yards across. Two horses and twelve bullocks are often used to drag the «diligence» through the river. After passing through another «algarroba» wood, we at last reach the city of Cordoba.

Cordoba is the heart of the Republic; it is famous for its delightful climate, and is situate in the midst of an amphitheatre of hills. The population is estimated at 20,000; the best inn is the Hotel de Paris. The traveller will find much to interest him in the old churches, the university, and other public buildings. If he make an excursion to the Sierras he will find capital shooting.

From Cordoba the route offers little of interest, till we reach Santiago: it passes through the villages of Chañar, Altamisque, and Loreto, skirting the desert of Salinas: the only rivers met with are, the Rio Primero after leaving Cordoba, and the Rio Dulce before arriving at Santiago.

Santiago del Estero is a delapidated town of 8,000 inhabitants, with a privileged climate: it stands in lat. 27.16, and long. 64.22. The Government-house and three churches are worth visiting. This town is ninety leagues north of Cordoba.

From Santiago to Tucuman is twenty-eight leagues, the route crossing the Rio Dulce. Nothing can exceed the fertility of the Province of Tucuman, the garden of South America, rich in every product of the tropical or temperate zones.

The city of Tucuman stands on a well-wooded plain, 358 leagues N.W. of Buenos Ayres, with a population of 12,000 souls: it is situate on a branch of the Rio Dulce, and is famous for the declaration of Independence, 9th July, 1816.

From Tucuman to Salta is sixty-nine leagues, through a diversified country of hill ranges and rivers, for we are now in the region of the Andes. This was formerly the highway from Buenos Ayres to Lima. The town of Salta was founded in 1582, and its present population is about 10,000.

The traveller may still go twenty leagues further north, to Jujuy, which is the last Argentine province, and borders on Bolivia. The town is insignificant; but some salt is produced from the neighboring «salinas,» and the discovery of petroleum seems to be an acknowledged fact. The navigation of the Vermejo will open up the resources of this remote province.

WESTERN ROUTE.

The Western route goes due west from Villa Nueva to Mendoza, then strikes off due north, skirting the foot of the Andes, to San Juan. The itinerary is as follows:—

Villa Nueva,	....	3	Cerrillos,	....	4½
Cabral, ...	....	3½	San Luis,	....	4½
Cañada de Luque,	....	2½	Tisera,	....	3½
Totoral, ...	....	4	Chosmes,	....	3½
Guanacho, ...	....	4½	Cabra,	....	11½
Tambito, ...	....	6	Villa de la Paz,	....	7½
Chucull, ...	....	4	Dormida,	....	4½
Rio Cuarto, ...	....	6½	Santa Rosa,	....	6½
Ojos de Agua,	....	3½	Retamo,	....	9
Barranquita,	....	3½	Mendoza,	....	6
Achiras, ...	....	4½	Jujuli,	....	13½
Portezuelo, ...	....	5½	Guanacache,	....	8½
Morro, ...	....	3½	Posito,	....	3½
Lorro, ...	....	4½			
Rio Quinto, ...	....	5½	San Juan,	....	149

From Villa Nueva to Rio Cuarto is twenty-seven leagues, and now we enter on a territory very much exposed to Indian forays; the road from Rio Cuarto traversing a wild and desolate tract of forty leagues, till reaching the town of San Luis.

San Luis has almost disappeared from the map, partly owing to its constant civil wars, and partly to the Indians. The whole province has only a handful of inhabitants; the city of San Luis is mostly composed of mud huts. It has its governor, legislature, &c.

From San Luis to Mendoza is 50 leagues, still through the desert. The road crosses the Desaguadero, before reaching the village of La Paz, and at last reaches Mendoza, at the base of the giant Cordillera.

Mendoza was destroyed by earthquake, March 20th, 1861, but is now partially rebuilt. Its chief importance arises from its passes over the Andes into Chile, and its communication with San Juan and Rosario.

The journey from Mendoza across the Cordillera of the Andes, to Santa Rosa, the first town met with on the Chilian side, can be done in four to six days mounted on a good mule, which may be hired from $8 to $10. In summer it is a most pleasant journey, and to those who have not seen the Cordillera scenery in all its grandeur it must prove a very interesting trip, but the traveller must not attempt it between the 1st of May and 1st

of November following, as the pass «La Cumbre» is generally closed and the entire road covered with snow to a depth of several yards. The «temporales» are most frequent in that season, and come down with terrific force.

There is a weekly coach to San Juan, fare $13; the distance is 32 leagues, through a very wild and mountainous country. A gentleman who recently made the trip from Rosario to San Juan gives the following notes of his journey:—

«The distance from Rosario to San Juan is computed about 280 leagues, the towns through which the coach passes being as follows:—

	Leagues.	Days.		Leagues.	Days.
Guardia Esquina,	24	1	San Luis, ...	25	1
Saladillo, ...	16		Mendoza, ...	75	3
Frayle Muerto,	10	1	San Juan, ...	48	2
Rio Cuarto, ...	50	2			
Achiras, ...	19	1	Total, ...	280	12
Morro, ...	13	1			

«From Rosario to Rio Cuarto the country is mostly level, the camps good and abounding in pasture termed 'pasto fuerte.' Between Saladillo and Rio Cuarto timber is very plentiful. Passing the last-named place the surface becomes broken and the views on all sides mountainous. In succession we skirt along the Sierras de Cordoba, Morro, and San Luis. Nothing can be more picturesque than the situation of Achiras, Morro, and San Luis, but the constant fear of the Indians effectually prevents any improvement in these towns. The river separating the provinces of San Luis and Mendoza is called Desaguadero, and there is a village of the same name. The road from San Luis thither is remarkable, traversing in its whole length large forests of algorroba, quebracho and other species of timber, all hard wood. It is as straight as an arrow for twenty leagues of its length, and is forty yards wide. It is without exception the finest road in the Republic, and if a little care were bestowed on it, would be at once a wonder and a model. From Desaguadero to Mendoza is fifty-five leagues. Here the aspect of the country is different from anything yet seen, the land on all sides being cultivated. The road is lined on either side by poplars, far as the eye can reach, and the cultivation being by means of artificial water drains well distributed, the surrounding vegetation is quite astonishing, and only comparable to that of the islands of the Paraná. The extent of land under agriculture in Mendoza is found to exceed 60,000 cuadras (200,000 acres) chiefly occupied by alfalfa, vines, and cereals. The principal industry

consists in fattening cattle for the Chilian markets: they enclose the animals in a field of alfalfa, which when eaten down, they turn them into another. What appears almost incredible, though true, is that an alfalfa field once sown, requires no further labor than irrigation, and will yield abundant crops of pasture for forty years or more. The amount cultivated in San Juan is 35,000 cuadras (120,000 acres) sown, as in Mendoza, for the most part with alfalfa, vines, and cereals, and here also the chief business is fattening cattle for Chile. The mountains on all sides abound in minerals: lead, silver, copper, and gold. There are also three coal mines in Huerta, Pié de Palo, and Jachal, which have not yet been worked, but are proved to contain rich and plentiful deposits: the abundance of timber has almost rendered the consumption of coal unnecessary. The city of San Juan is well built and presents a pleasing aspect. Many of its streets are well paved, and each house has its own supply of water by means of a canal communicating with the Rio San Juan. The outskirts are charming, the city being surrounded by small mountain chains descending from the great Andes.»

From San Juan the traveller may make excursions to the silver mines of Marayes and Hilario; or continue his course further north to Rioja and Catamarca.

Rioja is about forty leagues from San Juan. The province has been made a howling wilderness by the incessant civil wars; it contains much mineral wealth undeveloped. The town of Rioja is at the foot of the Andes.

Catamarca is about forty leagues beyond Rioja: the province is rich in mineral and agricultural products. Messrs. Lafone and Carranza are the chief miners. There is a good business in fattening cattle for Chile. Tobacco, wine, and fruits are raised in great quantities.

In 1864 the Congress authorized an emission of eight per cent Bonds for the construction of roads and bridges through the Republic. The eminent firm of Docwra, Wells, and Dawson, of London had made proposals, but subsequently declined to take the Bonds for security. Nevertheless some roads were commenced by Government, the local contractors taking the bonds at fifty per cent., viz:—Concordia to Restauracion, San Luis to Cerrillos, San Luis to San Juan, San Juan to Rioja, San Juan to Tontal and Chile, Cordoba to Rioja, Cordoba to Famatina, Salta to Tucuman, Salta to Jujuy, Salta to the Rio Vermejo, Cordoba to Catamarca.

Besides these there are thirty-one roads projected, as follows;—

Jujuy—A road to Bolivia, with two or three bridges over rapid rivers. Another to unite the chief town with some port on the Rio Vermejo.

Salta—Continuation of the road to Palo Santo, and those of Jujuy and Tucuman.

Tucuman—Continuation of the great Northern route to Santiago. A new road direct to Catamarca by the Cuesta Totaral.

Catamarca—Branch to Santiago, and road to Copiapó, with houses of refuge, to ensure constant communication with Chile even in winter. The Totoral to be prolonged to Rioja, and a direct line drawn to Cordoba.

Rioja—Waggon-roads to Cordoba and San Juan; another across the Llanos to San Javier in Cordoba, for junction with the grand western route. Post-houses and fresh water must be provided along these roads.

San Juan—Roads to Rioja and Copiapó, with houses of refuge in the Cordillera. The Mendoza road to be deviated, and the Cordoba one improved.

Mendoza—The Uspallata pass to Chile to be provided with the proper number of houses of refuge for transandine travellers.

San Luis—Road to Rioja, forming junction with that of the Llanos.

Cordoba—Deviation and improvement of the great North highway to Santiago. Carriage-way across the Sierra, to meet that of the Llanos to Rioja.

Santiago—Improvement of Sunchales route, and the central road through the Gran Chaco coming out in front of Corrientes.

Santa Fé—Junction with the Santiago road, and direct road to Cordoba, with a bridge over the Carcarañá.

Corrientes—Road from Restauracion to Misiones, and from the latter district to the city of Corrientes.

Entre-Rios—Highway to Corrientes, passing through La Paz.

Buenos Ayres—One or two bridges over the Arroyo Medio en route for the province of Santa Fé. A complete postal system on the West and South frontiers.

CHAP. IX.

ENTERPRISES, PROJECTS, AND CONCESSIONS.

CONSEQUENT on the pacification of the Republic in 1861, a number of important enterprises sprung up, many of which were protected by Government guarantee and monopoly. Some have been already completed or are in train, others fell through, either owing to want of capital or to the renewal of hostilities in these countries in 1865. Others still remain as projects, waiting only a favorable occasion for realization.

The CENTRAL ARGENTINE RAILWAY, from Rosario to Cordoba, 247 miles, was first projected in 1853, under General Urquiza's administration. On the 5th September 1862, a concession was made by Congress in favor of Mr. Wheelwright, which, as subsequently amended, stood thus—

1. The cost of the line not to exceed £6,400 per mile.

2. The land necessary for the line to be given by Government; also, a grant of a league of land on each side along the line.

3. Government guarantee of 7 per cent. interest for forty years on cost of construction.

4. The line to be finished within six and a-half years.

The works were inaugurated in April 1863, and although some delay was caused by the Paraguayan war the line is now running to Villa Nueva, 170 miles, and will be finished to Cordoba in 1869. There is a project to continue the railway to Tucuman and across the Andes, for which purpose Señor Moneta, Government engineer, made surveys in June 1868.

The SOUTHERN RAILWAY, from Buenos Ayres to Chascomus, is 72½ miles long, the concession from the Buenos Ayres Legislature to Mr. Edward Lumb bearing date 11th June 1862.

1. The cost of the line was put down at £10,000 per mile.

2. The Buenos Ayres Government guaranteed 7 per cent. for forty years on the cost.

3. If the line be prolonged to Dolores (eighty miles further south) the same guarantee will be given.

4. The railway to be exempt from all tax for forty years.

The Legislature refused to admit the cost of construction at more than £700,000, whereupon the guarantee on the additional sum of £25,000 was collectively given by the following merchants: Messrs. Thomas Armstrong, John Fair, George Drabble, Edward Lumb, Henry Harratt, Henry A. Green, Gregorio Lezama, Ambrosio P. Lezica, and Federico Elortondo. The works were commenced by Messrs. Peto & Betts on 8th March 1864, and the line was completed before the close of 1865. Last year the net profits gave 5 per cent. on the capital; but, every year the traffic is improving, and the guarantee will soon be unnecessary.

The NORTHERN RAILWAY, was begun in 1860, the concessionaire being Mr. Edward A. Hopkins, but the works were destroyed the following year by a high tide. The enterprise was continued in 1861 by Messrs. Croskey & Murray, who again inaugurated the works in February 1862. The concession stipulated:—

1. The cost of the line £150,000, for sixteen miles.

2. Government guaranteed interest seven per cent. for twenty years.

The line was opened to San Fernando on 5th February, 1864. In October of the same year the Legislature of Buenos Ayres gave a concession for prolonging the line to Zarate, with a guarantee of seven per cent. for twenty years, but limiting the cost to £7,100 per mile. This concession lapsed, as the prolongation works were to be commenced within twelve months and concluded in three years. The line was, however, prolonged two miles to the Tigre, which is used as a port for the steamboat traffic of the upper rivers.

The BOCA AND ENSENADA RAILWAY, works were begun by Mr. Wheelwright on 23rd February, 1863, and the concession granted in the following July, viz.:—

1. The Government concedes permission to William Wheelwright to construct and run for ever a railway, which shall start from the Paseo Julio, where the Northern Railway terminates, to the Boca del Riachuelo, Barracas, and Ensenada.

2. The road to Ensenada must be concluded before the 1st March, 1867, unless in view of the great importance of making a previous survey of the capabilities of that port to adapt it to the necessities of Buenos Ayrean commerce, it should be agreed on between the Government and the concessionaire, to make of this a practical experiment.

3. In case that Ensenada will admit of being made to meet the necessities of the commerce of Buenos Ayres, such as a port of loading and discharging vessels, and that the Government approves of the plans, it is agreed that the concessionaire of the railway shall take charge of the work, having first arranged with the Government.

4. The Government guarantees to the concessionaire that for the term of twenty years no other railway from the Custom-house to the Boca, Barracas, and Ensenada, whether propelled by steam or otherwise, shall be permitted.

On 8th September, 1865, the line was opened as far as Barracas, three miles; and in November of same year a surveying expedition proceeded to Ensenada to examine its condition as a port, and the difficulty offered by the bar: the report was favorable, but no further steps were taken in the matter. The line now runs to Barracas, and the bridge over the Riachuelo is being constructed, to push on the works to Ensenada.

The Rio Salado navigation concession was given to Don Esteban Rams in 1863: the history of the enterprise has been fully explained in the chapter on the Rio de la Plata and its tributaries.

The Artesian Well of Barracas was begun by Messrs. Sordeaux & Co., on 1st June, 1859, with the object of carrying away the offal of the saladeros, the saladeristas and Government defraying the expense. After two months' labor the bore reached a depth of 96 feet, viz.: sand, 40ft.; slime and dark-blue ochre, 13ft.; tosca, 7ft.; fluid yellow and grey sand, 36ft. In December, 1861, the works were renewed, and by February, 1862, the bore reached 234 feet, having traversed a bed of marine shells. On 14th March, 1862, the water rose through the tubes and poured out in a 'jet d'eau': on July 6th the Artesian Well was inaugurated by President Mitre, and since then it has been much in use as a bath. The water is unfit to drink, but possesses saline medicinal qualities.

The Electric Telegraph (Buenos Ayres to Montevideo) concession was granted on 9th June, 1864, viz.:—

1. Exclusive privilege conceded to Messrs. Proudfoot & Grey for fifteen years, from conclusion of works.

2. Permission to erect posts on highroads or elsewhere.

3. Government to protect the wires by all possible means.

4. Government messages half price.

5. In case of misunderstanding between the Republics, the Argentine Government not to stop the wires, nor to have right to inspect messages unless private correspondence be prohibited.

The cable was laid from Punta Lara to Colonia, twenty-six miles, in October 1866, and the wires opened for traffic a few weeks later.

Telegraph Wires to Chile.—In December 1866, Messrs. Hopkins & Cary obtained a concession to lay down wires from Buenos Ayres to Chile, as follows:—

1. The line shall be completed within two years from the date of concession.

2. The Government, on conclusion of the line, shall pay the contractor a subvention of 8 per cent. per annum for twelve years, on a cost of $200 s. per mile.

3. The Government shall cede to the company fifty squares of public lands for every fifteen miles of telegraph.

4. If the whole of the line be not completed within the term specified in clause 2, the Government shall reduce 1 per cent. on the subvention for every four months so delayed in finishing the line.

This project lapsed, owing to the death of Mr. Street, the eminent contractor of San Francisco.

Traction Engines.—In August 1863, Messrs. Rossignol, Beare, & Puyrredon obtained a concession for traction engines throughout the Republic; the first line to be established in eighteen months, and others to Rosario, Cordoba, Tucuman, and Mendoza in three years. The construction of roads and bridges was to be at the cost of the company, whose capital was fixed at £200,000, the Government guaranteeing 7 per cent. on actual outlay. In 1864 Mr. Beare brought from England an engine called El Buey, which made an unsuccessful experiment from Barracas to town, and the project was abandoned. The soil seems too soft and light for such locomotives.

Roads and Bridges.—In September 1863, Congress passed the following law:—

1. The President is authorised to emit $1,000,000 in shares, which shall be denominated Roads and Bridges Stock.

2. These shares shall be of $20, $50, $500, and $1,000 s., with an interest of 8 per cent., payable half yearly, and with 3 per cent. amortization.

3. These shall be only issued at par, and shall be paid out only when new enterprises shall require it.

For a list of the roads made and projected the reader is referred to Chap. vii.

San Juan Mining Company.—In November 1862, Governor Sarmiento of San Juan, and President Mitre, aided Major Rickard in getting up a joint-stock company, capital £22,000, for the working of silver ores at Hilario. Mr. Rickard went to England for machinery and miners, returning in 1863, and proceeding at once to build an extensive factory at Hilario. Troubles began with the shareholders in August 1864, and the works were paralysed. A new company was, however, formed in London in November 1867, and it is hoped the works will shortly be resumed.

Klappenbach's Mining Works, situate at La Huerta, thirty-five leagues from San Juan, were begun in September 1864, and are now completed: they can smelt 100 tons of ore daily. The result of the smelting in 1865 was—1,446 marks of pure silver; in the first eight months of 1868 it was 6,589 marks. In September 1868, Messrs. Klappenbach formed a joint-stock company of £46,000 capital, in £200 shares: some shares not subscribed for were taken up by the Argentine Government.

Carriage Road over the Andes.—In February 1865, a project was set on foot by M. Carpentier, a French resident in Chile, to make a highway from Rio Teno in Chile to Valle Hermoso in the Argentine Republic; the road to be sixteen feet wide and practicable for carriages. M. Carpentier obtained a concession from the Chilian Government of a right of toll for twenty years. He estimated the cost at £50,000, and engaged to finish it in three years. If the project be ever carried out it will be a great gain for travellers crossing the Cordillera.

Eastern Argentine Railway.—In February 1863, Minister Rawson instructed Smith, Knight, & Co., London, to prepare surveys for a line from Concordia in Entre Rios to Mercedes in Corrientes. The following concession was granted in August 1864:—

1. The cost shall not exceed £13,353.

2. The National Government guarantees 7 per cent. interest on the capital invested.

3. The line to have three sections: 1st. From Concordia to Federacion; 2nd. From Federacion to Monte-Caseros; and, 3rd. From Monte-Caseros to Mercedes.

4. The first section may be commenced at once; but the second not until

the first yields 3½ per cent. net on the capital; and the third when both first and second give the same (3½ per cent.) net returns.

5. All lands necessary for the line, stations, &c., shall be ceded gratis to the company.

6. At least eighteen miles shall be open to traffic within two years, and the rest of the first section in twelve months later.

7. Government may interfere in the traffic when the dividends exceed 15 per cent.

There is every likelihood of this enterprise being revived, and the Governments of Entre Rios and Corrientes will perhaps give a land-grant along the line, similar to that of the Central Argentine.

Luxan and Salto Railway.—This was a project by M. Lacroze, to run a branch from the Western Railway northwards, the Government of Buenos Ayres finding the funds, to be reimbursed in part by municipal taxation in the «partidos» benefited by the line. It was judged impracticable.

Paraná and Nogoya Railway.—The surveys for this line were made in October 1865 by Neville Mortimer, C. E., who estimated the cost at £321.536 sterling; or £5,024 per mile, the length being 64 miles. Nothing has since been done in the matter.

Lobos Railway.—In June 1867 several land-holders of Lobos and neighbouring partidos prevailed on Governor Alsina to order the surveys of a branch-line from the Western to Lobos. The idea of Government consisted in proposing to the Legislature of Buenos Ayres the emission of twenty millions currency (£160,000 sterling) in 6 per cent. funds, saleable at 85, with an annual sinking-fund of 1 per cent. Vice-President Paz and Dr. Acosta assured Governor Alsina that most of the said funds would be taken up in Lobos, Navarro, Saladillo &c.: they even promised to get all the land gratis, along the route. The branch-line would start from Moreno or Rodriguez station; the cost would be about £5,000 per mile, but it is difficult to suppose the funds could be provided by subscription among the estancieros.

Rio Luxan Port and Railway.—In October 1867, a project was started, to run a branch railway from Floresta, on the Western line, to the River Lujan. The cost was estimated at £100,000, and the projectors sought no guarantee but a monopoly for twenty years, the great object being to make a port on the Rio Lujan, for the city of Buenos Ayres, at a place where the water is said to have a depth of twelve feet.

San Fernando Canalization.—The concession, bearing date 20th July, 1863, is as follows:—

1. Mr. Edward A. Hopkins is hereby authorized to form a joint-stock company for the canalization of the Arroyo Capitan, between the Parana de las Palmas and Lujan river, opposite the town of San Fernando, with a mole, warehouses, and deposit stores, suitable to the requirements of the coasting craft of the upper rivers.

2. The capital of the company shall not exceed one million five hundred thousand silver dollars.

3. The company may charge the tolls, mole, and deposit dues which it shall judge fit, for the term of twenty years, provided that the receipts do not exceed the sum of eighteen per cent nett profit on the capital.

4. The Arroyo del Capitan shall be canalized and improved: and shall have at least eighteen metres in breadth throughout the whole length at surface, and three metres in depth at mean tide.

5. The dues payable for the use of the canal shall only be recoverable in proportion to its cost, which must not exceed the sum of three hundred and seventy-eight thousand four hundred and twelve silver dollars, according to the estimates of the concessionaire.

6. At the expiration of the twenty years mentioned in article 3, the canal shall be free from all the company's dues.

7. At any time during the period of this concession the Government shall have the right of expropriating the canal works for the benefit of the public, at the value of their cost, and 25 per cent extra as indemnification.

8. The company shall have the requisite number of tug-boats for the service of the moles and canal.

9. The works shall commence within the period of eighteen months.

In 1865 Congress gave a prolongation of the concession, and Mr. Hopkins began the works in the following year. A company was formed in Buenos Ayres in 1867, since when the works go on favorably. The iron-work is ordered from England, the machinery from the United States; among the latter is a dredge capable of throwing 100 tons an hour.

Port for Buenos Ayres.—In 1859, Mr. Coghlan, C.E., prepared a complete survey, with plans, for the construction of a harbor, the estimated cost being £800,000: the plans still decorate the ante-chamber of the Provincial Legislature. In 1864 the project was taken up under another form by Señor Garay. There is now some talk of Congress devoting the extra duties hitherto used for war purposes in this more useful manner. In 1866 Mr. Petty, the pilot, submitted a project to clear the roadstead of the many wrecks and lost anchors lying about; he asked no other remuneration than the anchors, &c., to be recovered, whereupon the authorities called

four tenders to clean the port, and nothing has since been done in the matter.

HARBOR AT THE BOCA.—In July 1863, Don Manuel Lynch submitted to Congress the subjoined project, which died, like so many others, in embryo—

1. The company shall construct, at their own risk and expense, a harbor for this city.

2. The entrance to such harbor will be near Quilmes, with a depth of water fourteen feet at low tide, with a proper sluice-gate.

3. This entrance will be prolonged as far as the Riachuelo de la Boca, by means of a canal.

4. The company shall erect, at their own cost, warehouses and depots.

5. When the section shall be finished to the Riachuelo, all vessels shall be obliged to enter the canal and Riachuelo for unloading or loading.

6. The company shall recover, in such cases, on unloading, 12 reals s. per ton register, and the same for loading.

7. The company shall have one or more tug-boats to take vessels in or out of the port, the fee for which shall not exceed 4 reals s. per ton register.

8. This concession shall be for a term of thirty years, after which the Government shall enter into full possession of the canals and lighthouse.

GUNPOWDER MANUFACTORY.—In September 1865, this company was formed, with a capital of £10,000, in shares of £50 each, under the direction of Mr. Liesenberg, who had had ten years' experience in Europe. An unlucky explosion occurred in July 1867, the day before the proposed inauguration: Mr. Liesenberg was seriously injured; but the enterprise was not abandoned. The works are situate at Palermo.

STEAM COMMUNICATION WITH UNITED STATES.—In August 1865, Congress voted £4,000 per annum as a subsidy for a branch line of the United States and Brazilian mail service: up to the present no branch has been established.

BUENOS AYRES WATER-WORKS.—In August 1863 a proposal was sent in by Messrs. Easton, Amos, & Co., London, to provide water-works for the city. The supply was to be 30,000 pipes daily, the water being taken from above the Gas-house. The cost was estimated at £102,000, for which the Municipality would give 7 per cent. bonds. Several other projects were initiated from time to time, but the Municipality paid no attention to the wants of the city, till, in January 1868, the cholera caused such ravages Governor Alsina and the Legislature took the matter in hand.

Mr. Coghlan was authorised to construct water-works near the Recoleta, at an estimated cost of £48,000, and an engineer was despatched to England for machinery.

Mr. Coghlan states, in a report to Don Emilio Castro, dated May 15, that the original design has been considerably extended, being now calculated for the distribution of 1,300,000 gallons daily. All the machinery being provided in duplicate the quantity may be at any time extended by additional reservoirs and filters. The addition of a third engine similar to the two already contracted for, would be sufficient for increasing the supply to 2,500,000 gallons daily.

The works were inaugurated with great pomp on the 15th September, the machinery is already shipped from England, and it is expected the whole project will be carried out early in 1869. The pipes will suffice for twelve miles of ground.

Drainage, Water Supply, and Paving.—There are several projects under consideration, some one of which will probably be carried out before long. The works undertaken by Mr. Coghlan are in a manner temporary, as they do not include drainage and paving, and the new proposals include the purchase of said works. The proposals of Robinson & Co., and Gotto & Neate, are the most important.

Thomas Robinson and Co.'s Proposals.

Drainage.—Will construct all necessary sewers, two disinfecting stations, gullies for street water, junction pipes to facilitate house drainage.

Water-works.—Will supply 2,000,000 gallons filtered water daily, constant pressure, fire-plugs at every cross street, hydrants, air valves, water tower, and cistern.

Will execute at least twelve squares (1,700 yards) of both works every two months, and complete all in four years. Will commence works immediately on signing contract.

Terms.—To be paid for 400 manzanas (blocks 425 feet square) £820,000 in Provincial Bonds bearing 7 per cent. interest, and 3 per cent. sinking fund, payable in London or Buenos Ayres at choice of contractor. For every additional manzana £1,350.

Gotto and Neate's Proposal: Capital, £1,200,000.

Sewerage.—Pipes to carry off sewage and rain water. Junctions to houses.

Water-works.—Supply of 6,000,000 gallons in twenty-four hours, constant pressure.

Paving.—Of 136 squares (58,000 lineal feet) with granite blocks, in concrete.

Will maintain and work water supply and drainage for term of concession, and keep paving in repair for one year.

Terms.—Monopoly for ninety-nine years. Exemption from duties, import and export. Payment by Provincial Government of $48 s. (£9 15s.) per annum for each house within the city. The Municipality to pay $25,000 s. (£5,100) per annum for water for fountains, fires, and watering the streets.

Export of Cattle.—In August 1868, Messrs. Alexander F. Baillie and P. Barry, on the part of a London company, petitioned the Argentine Government for a concession to export live stock to Europe. The capital of the company was stated at £500,000, and a fleet of seven first-class steamers would be constructed, with the double purpose of bringing out emigrants, and taking home cattle in the return voyage: the annual export of stock to be at least 5,000 head of horned cattle and 3,000 sheep. They solicited a monopoly for seven years, and a total exemption from Customs'-duties. Mr. Baillie returned to England in October, and states that he has obtained the concession prayed for, as far as regards all exportation of live stock to England and France.

New Gas Company.—In the beginning of 1867, Mr. James Bell of Montevideo, associated with some men of influence and capital in Buenos Ayres, projected a new gas company in Buenos Ayres, in opposition to the original company established in 1856. The capital of the old company is $18,000,000, or £144,000 sterling, and the dividends in recent years have varied from 20 to 30 per cent. per annum: the shares are still over 50 per cent. premium. The present price of gas is about £1 3s. per 1,000 cubic feet, and the proposed new company promises to make a great reduction; as yet, however, it remains merely a project, the only step taken being the submission of the statutes to the Argentine Government, which has approved of same. The term of monopoly granted to the old company has long since expired. It is intended to erect the works of the new company at the south end, in Barracas.

CHAP. X.

TREATIES OF COMMERCE AND NAVIGATION.

THE treaty of amity, commerce, and navigation between the Argentine Republic and Great Britain bears date 2nd February 1825, and is as follows:—

TREATY WITH GREAT BRITAIN.

Extensive commercial intercourse having been established for a series of years between the dominions of His Britannic Majesty, and the territories of the United Provinces of Rio de la Plata, it seems good for the security, as well as encouragement of such commercial intercourse, and for the maintenance of good understanding between His said Britannic Majesty and the said United Provinces, that the relations now subsisting between them should be regularly acknowledged and confirmed by the signature of a Treaty of Amity, Commerce, and Navigation.

For this purpose they have named their respective Plenipotentiaries, that is to say:—

His Majesty, the King of the United Kingdom of Great Britain and Ireland, Woodbine Parish, His said Majesty's Consul-General, in the Province of Buenos Ayres and its dependencies; and the United Provinces of Rio de la Plata, Sr. D. Manuel José Garcia, Minister Secretary for the Department of Government, Finance, and Foreign Affairs, of the National Executive Power of the said Provinces.

Who, after having communicated to each other their respective Full Powers, found to be in due and proper form, have agreed upon and concluded the following articles:—

Art. 1. There shall be perpetual amity between the dominions and subjects of His Majesty the King of the United Kingdom of Great Britain and Ireland, and the United Provinces of Rio de la Plata and their inhabitants.

Art. 2. There shall be, between all the territories of His Britannic Majesty in Europe, and the territories of the United Provinces of Rio de la Plata, a reciprocal freedom of commerce. The inhabitants of the two countries respectively, shall have liberty freely and securely to come with their ships and cargoes to all such places, ports, and rivers in the territories aforesaid, to which other foreigners are or may be permitted to come, to enter into the same and remain and reside in any part of the said territories respectively; also to hire and occupy houses and warehouses for the purposes of their commerce; and generally the merchants and traders of each nation, respectively, shall enjoy the most complete protection and security for their commerce; subject always to the laws and statutes of the two countries respectively.

Art. 3. His Majesty the King of the United Kingdom of Great Britain and Ireland, engages further, that in all His Dominions situated out of Europe, the inhabitants of the United Provinces of Rio de la Plata shall have the like liberty of commerce and navigation stipulated for in the preceding article, to the full extent in which the same is permitted at present, or shall be permitted hereafter to any other nation.

Art. 4. No higher or other duties shall be imposed on the importation into the territories of His Britannic Majesty, of any articles of the growth, produce or manufacture of the United Provinces of the Rio de la Plata, and no higher or other duties shall be imposed on the importation into the said United Provinces, of any articles of the growth, produce, or manufacture of His Britannic Majesty's dominions, than are, or shall be payable on the like articles, being the growth, produce, or manufacture, of any other foreign country; nor shall any other, or higher duties or charges be imposed in the territories or dominions of either of the contracting parties, on the exportation of any articles to the territories or dominions of the other, than such as are or may be payable on the exportation of the like articles to any other foreign country: nor shall any prohibition be imposed upon the exportation of any article, the growth, produce or manufacture of His Britannic Majesty's dominions or of the said United Provinces, which shall not equally extend to all other nations.

Art. 5. No higher, or other duties or charges on account of tonnage, light, or harbour dues, pilotage, salvage in case of damage or shipwreck, or any other local charges, shall be imposed, in any of the ports of the said United Provinces, on British vessels of the burthen of above one hundred and twenty tons, than those payable in the same ports, by vessels of the said United Provinces of the same burthen; nor in the ports of any of His Britannic Majesty's territories on the vessels of the said United Provinces of above one hundred and twenty tons, than shall be payable in the same ports, on British vessels of the same burthen.

Art. 6. The same duties shall be paid on the importation into the said United Provinces of any article the growth, produce, or manufacture of His Britannic Majesty's dominions, whether such importation shall be in vessels of the said United Provinces or in British vessels; and the same duties shall be paid on the importation into the dominions of His Britannic Majesty of any article the growth, produce or manufacture of the said United Provinces, whether such importation shall be in British vessels, or in vessels of the said United Provinces. The same duties shall be paid, and the same drawbacks and bounties allowed, on the exportation of any article of the growth, produce, or manufacture of His Britannic Majesty's dominions to the said United Provinces, whether such exportation shall be in vessels of the said United Provinces, or in British vessels, and the same duties shall be paid, and the same bounties and drawbacks allowed on the exportation of any articles the growth, produce, or manufacture of the said United Provinces to His Britannic Majesty's dominions, whether such exportation shall be in British vessels, or in vessels of the said United Provinces.

Art. 7. In order to avoid any misunderstanding with respect to the regulations which may respectively constitute a British vessel, or a vessel of the said United Provinces, it is hereby agreed, that all vessels built in the dominions of His Britannic Majesty and owned, navigated, and registered according to the laws of Great Britain, shall be considered as British vessels; and that all vessels built in the territories of the said United Provinces, properly registered and owned by the citizens thereof, or any of them, and whereof the master and three fourths of the mariners, at least, are citizens of the said United Provinces, shall be considered as vessels of the said United Provinces.

Art. 8. All merchants, commanders of ships, and others, the subjects of His Britannic Majesty, shall have the same liberty in all the territories of

the said United Provinces, as the natives thereof, to manage their own affairs themselves, or to commit them to the management of whomsoever they please, as broker, factor, agent, or interpreter; nor shall they be obliged to employ any other persons for those purposes, nor to pay them any salary or remuneration, unless they shall choose to employ them; and absolute freedom shall be allowed, in all cases, to the buyer and seller to bargain and fix the price of any goods, wares, or merchandize imported into, or exported from, the said United Provinces, as they shall see good.

Art. 9. In what relates to the loading or unloading of ships, the safety of merchandise, goods, and effects, the disposal of property of every sort and denomination, by sale, donation, or exchange, or in any other manner whatsoever, as also the administration of justice, the subjects and citizens of the two contracting parties shall enjoy, in their respective dominions, the same privileges, liberty, and rights, as the most favoured nation, and shall not be charged, in any of these respects with any higher duties or imposts than those which are paid, or may be paid, by the native subjects or citizens of the Power in whose dominions they may be resident. They shall be exempted from all compulsory military service whatsoever, whether by sea or land, and from all forced loans, or military exactions or requisitions; neither shall they be compelled to pay any ordinary taxes, under any pretext whatsoever, greater than those that are paid by native subjects or citizens.

Art. 10. It shall be free for each of the two contracting parties to appoint Consuls for the protection of trade, to reside in the dominions and territories of the other party; but before any Consul shall act as such, he shall, in the usual form, be approved and admitted by the government to which he is sent; and either of the contracting parties may except from the residence of Consuls, such particular place as either of them may judge fit to be so excepted.

Art. 11. For the better security of commerce between the subjects of His Britannic Majesty, and the inhabitants of the United Provinces of Rio de la Plata, it is agreed that if at any time any interruption of friendly commercial intercourse, or any rupture should unfortunately take place between the two contracting parties, the subjects or citizens of either of the two contracting parties residing in the dominions of the other, shall have the privilege of remaining and continuing their trade therein, without any manner of interruption, so long as they behave peaceably, and commit no offence against the laws; and their effects and property,

whether entrusted to individuals or to the state, shall not be liable to seizure or sequestration, or to any other demands than those which may be made upon the like effects or property, belonging to the native inhabitants of the state in which such subjects or citizens may reside.

Art. 12. The subjects of His Britannic Majesty residing in the United Provinces of Rio de la Plata, shall not be disturbed, persecuted, or annoyed on account of their religion, but they shall have perfect liberty of conscience therein, and to celebrate Divine service either within their own private houses, or in their own particular churches or chapels, which they shall be at liberty to build and maintain in convenient places, approved of by the Government of the said United Provinces. Liberty shall also be granted to bury the subjects of His Britannic Majesty who may die in the territories of the said United Provinces, in their own burial places, which in the same manner they may establish and maintain. In the like manner, the citizens of the said United Provinces shall enjoy, within all the dominions of His Britannic Majesty a perfect and unrestrained liberty of conscience, and of exercising their religion publicly or privately, within their own dwelling houses, or in the chapels and places of worship appointed for that purpose, agreeable to the system of toleration established in the dominions of His Majesty.

Art. 13. It shall be free for the subjects of His Britannic Majesty, residing in the United Provinces of Rio de la Plata, to dispose of their property, of every description, by will or testament, as they may judge fit; and in the event of any British subjects dying without such will or testament in the territories of the said United Provinces, the British Consul-General, or, in his absence, his representative, shall have the right to nominate curators to take charge of the property of the deceased, for the benefit of his lawful heirs and creditors, without interference, giving convenient notice thereof to the authorities of the country; and reciprocally.

Art. 14. His Britannic Majesty being extremely desirous of totally abolishing the slave trade, the United Provinces of Rio de la Plata engage to co-operate with his Britannic Majesty for the completion of so beneficent a work, and to prohibit all persons inhabiting within the said United Provinces, or subject to their jurisdiction, in the most effectual manner, and by the most solemn laws, from taking any share in such trade.

Art. 15. The present treaty shall be ratified, and the ratifications shall be exchanged in London within four months, or sooner if possible.

In witness whereof, the respective Plenipotentiaries have signed the same, and have affixed their seals thereunto.

Done at Buenos Ayres, the second day of February, in the year of our Lord one thousand eight hundred and twenty-five.

WOODBINE PARISH (L. S.) (H. M. Consul-General).
MANUEL JOSÉ GARCIA (L. S.)

In 1839 a treaty was concluded between England and Buenos Ayres for the suppression of the slave trade, slavery having been already abolished in the River Plate.

In 1842 the United States solemnly recognised the emancipation of La Plata from Spain.

In 1849 Great Britain raised the blockade, restored Martin Garcia, and made peace with the tyrant Rosas, the latter consenting to withdraw his forces from the Banda Oriental. By this treaty the navigation of the rivers Paraná and Uruguay was recognised as inland navigation, solely pertaining to the Argentine Republic and Banda Oriental.

In 1853, after the fall of Rosas, General Urquiza hastened to throw open the navigation of the rivers to the flags of all nations. On the 10th July of said year the Ministers of the United States, Great Britain, and France, proceeded to San José de Flores, and there concluded identical treaties on this subject.

TREATY WITH THE UNITED STATES.

The President of the United States and His Excellency the Provisional Director of the Argentine Confederation, being desirous of strengthening the bonds of friendship which so happily subsist between their respective States and Countries, and convinced that the surest means of arriving at this result is to take in concert all the measures requisite for facilitating and developing commercial relations, have resolved to determine by treaty the conditions of the free navigation of the rivers Paraná and Uruguay, and thus to remove the obstacles which have hitherto impeded this navigation.

With this object they have named as their Plenipotentiaries, that is to say:—

The President of the United States, Robert C. Shenck, Envoy Extraordinary and Minister Plenipotentiary of the United States to Brazil, and John S. Pendleton, Chargé d'Affaires of the United States to the Argentine Confederation.

And His Excellency the Provisional Director of the Argentine Confederation, Doctor Don Salvador Maria del Carril, and Doctor Don José Benjamin Gorostiaga.

Who, after having communicated to each other their full powers, found in good and due form, have agreed upon the following articles:—

Art. 1. The Argentine Confederation, in the exercise of her sovereign rights, concedes the free navigation of the rivers Paraná and Uruguay, wherever they may belong to her, to the merchant vessels of all Nations, subject only to the conditions which this treaty establishes, and to the regulations sanctioned or which may hereafter be sanctioned by the National authority of the Confederation.

Art. 2. Consequently, the said vessels shall be admitted to remain, load and unload in the places and ports of the Argentine Confederation which are open for that purpose.

Art. 3. The Government of the Argentine Confederation, desirous to provide every facility for interior navigation, agrees to maintain beacons and marks for setting out the channels.

Art. 4. A uniform system shall be established by the competent authorities of the Confederation for the collection of the Custom-house duties, harbour lights, police and pilotage dues along the whole course of the waters which belong to the Confederation.

Art. 5. The high contracting parties, considering that the island of Martin Garcia may, from its position, embarrass and impede the free navigation of the confluents of the River Plate, agree to use their influence to prevent the possession of the said island from being retained or held by any State of the River Plate or its confluents which shall not have given its adhesion to the principle of their free navigation.

Art. 6. If it should happen (which God forbid) that war should break out between any of the States, Republics, or Provinces, the rivers Paraná and Uruguay shall remain free to the merchant flags of all nations, excepting in what may relate to munitions of war, such as arms of all kinds, gunpowder, lead, and cannon balls.

Art. 7. Power is expressly reserved to His Majesty the Emperor of Brazil, and the Governments of Bolivia, Paraguay, and the Oriental State of Uruguay, to become parties to the present treaty in case they should be disposed to apply its principles to the parts of the rivers Paraná, Paraguay, and Uruguay, over which they may respectively possess fluvial rights.

Art. 8. The principal objects for which the rivers Paraná and Uruguay are declared free to the commerce of the world, being to extend the mercantile relations of the countries which border them, and to promote immigration, it is hereby agreed that no favour or immunity shall be

granted to the flag or trade of any other nation which shall not equally extend to those of the United States.

Art. 9. The present treaty shall be ratified on the part of the Government of the United States within fifteen months from its date, and within two days by His Excellency the Provisional Director of the Argentine Confederation, who shall present it to the first Legislative Congress of the Confederation for their approbation.

The ratifications shall be exchanged at the seat of Government of the Argentine Confederation within the term of eighteen months.

In witness whereof the respective Plenipotentiaries have signed this treaty, and affixed thereto their seals.

Done at San José de Flores on the tenth day of July in the year of our Lord one thousand eight hundred and fifty-three.—ROBERT SCHENK—JOHN S. PENDLETON—SALVADOR MARIA DEL CARRIL—JOSÉ B. GOROSTIAGA.

In 1858, General Urquiza's Government concluded a convention with H.B.M.'s Minister, Mr. Christie, at Paraná, for payment of damages caused to British subjects during the civil wars, the claimants receiving 6 per cent. bonds.

CHAP. XI.

BIOGRAPHIES OF PUBLIC MEN.

PRESIDENT SARMIENTO.

DOMINGO FAUSTINO SARMIENTO was born in the town of San Juan at the end of February 1811, nine months after the glorious 25th of May that marks the birthday of the Argentine nation. His father, though uneducated, was an enthusiastic patriot, and took an active part in the revolution which emancipated his native country from the Colonial regime. Finding, at every step, the disadvantages of his ignorance, he determined that his son should not share them, and, from the early age of five years, sent him to school. There young Sarmiento, by his application and talent, gave already signs of his future greatness. Being originally destined for the Church, he was sent, in 1824, to the Loreto Seminary at Cordova; but the revolution of Carita, having deprived him of his Latin master, he began in 1825 to study mathematics and land surveying under Mr. Barreau, the engineer of the province. In the same year he went to San Luis with his relation, the Clerigo Oro, to continue the studies which the revolution of the previous year had interrupted. In 1826, returning to his native town, he hired as clerk in a store, but his nights were devoted either to reading or to discussions with his uncle, Father Albarracin, on the Bible. He took an active part in the campaign that followed against Facundo Quiroga in San Juan, and that against Fraile Aldao in Mendoza, which ended in the catastrophe of Pilar, where he rose to the rank of Captain, and where his courage and presence of mind saved him from many

dangerous chances. The victory of Facundo Quiroga, in Chacon, in 1831, obliged him and most of his companions to emigrate to Chile, where he was successively schoolmaster in the Andes, bar-keeper in Pocuro, clerk in a commercial house in Valparaiso, and major-domo of mines in Copiapo. In 1836 he returned to San Juan, poorer than he had left, and suffering from severe illness. He then, in society with Drs. Rosas, Cortinez, and Aberastain, devoted his energies to promote several institutions of great utility for the province of San Juan, such as a college for girls, another for boys, a dramatic society, and last, though not least, the *Zonda*, a weekly publication, that tended to improve and instruct the masses. General Benavides, who was then the absolute ruler of San Juan, took umbrage at the influence and position young Sarmiento was acquiring, and, not only suppressed the *Zonda*, but left no stone unturned, by vexatious persecution, to oblige him once more to emigrate. In this he at last succeeded; and in November 1840, Sarmiento again crossed the Cordillera, doomed to eat for a long time the hard-earned bread of exile. On his second visit to Chile he began to take an active part in the politics of his adopted country, and, both as editor of several papers, and as a writer of literary works, more especially of education, he acquired for himself a fame which found echo even in the Old World. In 1846 and 1847 he was sent to Europe on a commission by the Chilian Government, to inspect and report upon schools and educational institutions; and on his return wrote an account of his travels, which he published. By his powerful writings in the periodical press, and in his other works, he contributed to the overthrow of the tyrant Rosas, and also took an active part in the final scene that was enacted on the plains of Caseros, where he held the rank of Chief of the Staff of the Grande Ejercito Libertador, and as such compiled the famous bulletin giving the official account of that celebrated action. Having, however, fallen out with Urquiza, he took up his residence in Buenos Ayres, and continued taking an active part in the troubled politics of those days, principally as editor of the *Nacional*. He was then appointed Inspector-General of Schools, and was able by his great experience and profound knowledge to effect vast improvements in the educational system of the country. After the battle of Cepeda he took office with Governor Mitre as Ministro de Gobierno, until the sad news arrived of the tragical death of his school-fellow and friend, Aberastain, and of the invasion of Juan Saa in the province of San Juan. He disagreed with his colleagues as to the action that the Government of Buenos Ayres was called to assume, and resigned. He subsequently took part in the campaign that was decided on the banks of the Pavon, and at the end of December re-entered San Juan, after

twenty-two years exile, at the head of a victorious army. Having been unanimously elected Governor of the province, he devoted for two years and a-half all his energy and ability to the moral and material progress of his native province, and had the glory of bringing to a successful issue the difficult campaign against the great «caudillo» of the west, General Peñaloza, commonly called the Chacho. In April 1864, at the entreaty of President Mitre, he consented to go as Minister Plenipotentiary to Washington. During a residence of four years in the United States he became imbued with the progressive ideas of Americans, especially admiring their system of popular education. In August 1868, he was elected President of the Argentine Republic, for the usual term of six years, the voting being as follows:—

For President.	Votes.	*For Vice-President.*	Votes.
Domingo F. Sarmiento, ...	79	Adolfo Alsina, ...	82
General Urquiza, ...	26	Wenceslao Paunero, ...	45
Rufino de Elizalde, ...	22	Manuel Ocampo, ...	2
Guillermo Rawson, ...	3	Francisco de las Carreras,	1
Dalmacio Velez Sarsfield,	1	Juan B. Alberdi, ...	1

On the 12th October 1868, he entered into office.

VICE-PRESIDENT ALSINA.

Adolfo Alsina was born in Buenos Ayres on the 13th of February 1829. His father having been driven into exile to Montevideo, young Adolfo began there his studies. In 1852 he came back to Buenos Ayres with his father, and continued his studies in the Buenos Ayres University, where he received his degree of Doctor of Laws. He took up arms in 1852, and shortly afterwards was made captain, and during the siege of 1853 commanded an important «canton,» where he distinguished himself for great bravery. He took an active part in political life, as member of the Club Libertad, and made himself notable by his energy and eloquence. Cepeda found him promoted to the rank of lieutenant-colonel, and on that day he earned great praise for military tact and courage displayed amidst adversity. He was present at Pavon, where he commanded a battalion of National Guards. After a journey to Europe, in 1866, the influence he held in the Club Libertad secured his election as Governor of Buenos Ayres, from which post he has been raised to the Vice-Presidency. He is of a jovial character, and very popular among his friends. To all the fine qualities of his father, the much-respected Dr. V. Alsina, he adds an energy of character which is

rarely met with among our public men, and which he inherits from his mother, Doña A. Maza, daughter of Dr. Manuel Vicente Maza, who took a busy part in public affairs during the time of Rosas, and whose tragic end is notorious. His administration as Governor of Buenos Ayres was remarkable for two important measures, either of which is sufficient to throw over it a lustre of imperishable glory: they are the foundation of the Oficina de Cambios, for fixing the value of the currency, and the city water-works.

GENERAL MITRE, EX-PRESIDENT.

Brigadier-General Bartolomé Mitre, the late President of the Republic, is a native of Buenos Ayres. He commenced his career as cadet of artillery in Montevideo in 1839, rose to the rank of captain fighting against the armies of Oribe and Urquiza until 1845, when he left for Chile, where he was appointed Colonel and fought against Bolivia, commanding a field battery; after the war he edited several papers, and came in 1852 commanding the Oriental artillery of the allied army against Rosas, in Caseros. Was elected deputy to the local legislature, which, having made strong opposition to the Government, was forcibly dissolved, and he with several others went into exile. He was recalled after the revolution of 1852, appointed commander of the forces in Buenos Ayres in the siege of 1853, and was made Minister of War; was promoted to the rank of General in 1859, and commanded the army of Buenos Ayres at the battle of Cepeda, which he lost. Was elected Governor of the Province in 1860, promoted to the rank of Brigadier-General, and won the battle of Pavon against the army of the Confederation, after which he pacified the country, and was unanimously elected President, in October 1862. During his administration Buenos Ayres made great progress in industry, commerce, and public enterprises. The Cordoba railway, electric telegraph, and other notable works are associated with this period; but it is also true that the state of the Upper Provinces was deplorable, the Indians devastating the frontiers with impunity. But for the war with Paraguay, the Argentine Republic must have advanced with rapid strides in all the arts of peace. General Mitre always evinced great friendship for Englishmen, and is an admirer of our literature, having translated some of Longfellow's poems. He stands high as a Spanish writer, for his life of General Belgrano, and is a member of several European literary associations. On the conclusion of his term of office, October 12th 1868, his friends and admirers purchased a house for him. He is fond of playing chess, and is a thorough republican in sentiment.

GENERAL URQUIZA.

Justo José de Urquiza, Captain-General, ex-President, and Governor of Entre-Rios, was born near Concepcion about the beginning of the present century. He began life behind a draper's counter, but soon took to a military career, in which he was eminently successful. He expelled Rosas in 1852, was elected President, gave a Constitution to the Republic, threw open the rivers to the flags of all nations, and restored order in the upper provinces. In 1859 he obliged Buenos Ayres to re-enter the Argentine Confederation, but was defeated by General Mitre in 1861. Since then he has lived in retirement at his princely estancia of San José, near Concepcion, where he treats all visitors, especially Englishmen, with the warmest hospitality. His cattle and sheep-farms are as large as some of the smaller European monarchies, and give him a splendid income. He encourages immigration, railways, &c., and has subscribed £20,000 to the Central Argentine Company. He was again elected Governor of Entre Rios in 1867, and was next after Sarmiento in the list of candidates for the Presidency. His last service to the Republic was the pacification of Corrientes, in union with the veteran diplomatist, Dr. Velez Sarsfield.

THE ARCHBISHOP OF BUENOS AYRES.

His Grace, Dr. José Maria Bustillos y Zeballos de Escalada, is descended of an old Spanish family, and was born in this city, A.D. 1800. He was raised to the episcopal dignity as co-adjutor to the late Bishop Medrano, under the title 'Bishop of Aulon, *in partibus*.' In 1854 a Papal bull created him Bishop of Buenos Ayres, and in 1866 the see was elevated to an Archbishopric. Dr. Escalada is a man of portly and patriarchal appearance, and is much esteemed for his unassuming manners. His palace, in the Plaza Victoria, adjacent to the Cathedral, was erected for him by the State, in 1861. He has a secretary, a chaplain, and three clerks for the despatch of business. His salary is about £1,000 a year. Out of his private fortune he has built a chapel near the English cemetery, connected with the diocesan clerical college.

GOVERNOR CASTRO.

Emilio Castro, Governor of the Province of Buenos Ayres, is a native of this city, and about fifty years of age. He has rendered long and varied services in many public capacities, and enjoys general confidence. In 1859 he was Chief of Police; in 1861 as commander of a battalion of National Guards he saw some military service. Being elected Senator in the Provincial Legislature, he held his seat in the Chamber till chosen its President.

Under the last administration he filled the office of Government Inspector of Railways. On the elevation of Governor Alsina to the Vice-Presidency of the Republic, Mr. Castro, as President of the Senate, became Governor *ex-officio*. Having been educated in Scotland, he has strong sympathies for everything English, and is of course conversant with our language.

DR. SARSFIELD, PRIME-MINISTER.

Dalmacio Velez Sarsfield was born in Cordova about the beginning of the present century, and received his education in the university of that city. He has long been reputed the first jurisconsult in the country, and his Civil Code, compiled at the request of Congress, is just published. During various administrations he held office successively, and his name is associated with Bank-reform and other important measures. In the last Congress he sat as Senator for his native province. The new President on assuming office gave him the direction of the Cabinet as Minister of Interior. Dr. Sarsfield claims to be descended from a distinguished Irish family: he is well read in the judicial literature of England and North America, and his name is not unknown in high legal circles in Germany. He is an able speaker and writer.

DR. VARELA, FOREIGN AFFAIRS.

Mariano Varela, Minister for Foreign Affairs, is son of the late Florencio Varela, a distinguished writer, who was assassinated in Montevideo by order of General Oribe, on account of his writings in the *Comercio del Plata*. The brothers Hector and Mariano Varela served their time as printers in Rio Janeyro; after the fall of Rosas they came to Buenos Ayres and established the *Tribuna* newspaper, which soon acquired the foremost place in the press of these countries. Dr. Varela distinguished himself no less in Congress than as a journalist, and entered the Ministerial career under Governor Alsina, as Minister of Finance for the Province of Buenos Ayres. The foreign merchants presented him with a gold medal for his labors in establishing a fixed currency. He has taken a diploma as Doctor of Laws, and is a good English scholar. He is only thirty-two years of age.

SR. GOROSTIAGA, FINANCE.

Benjamin Gorostiaga, even before his appointment to the portfolio of Finance, was favorably known as a political economist, having gained an early reputation under the old regime at Paraná. During his parliamentary career in the Congress convened by General Mitre, he was always remarkable for his clearness of views, and his mastery of statistical returns. He is about sixty years of age, and has a fine estancia near Chivilcoy.

DR. AVELLANEDA, INSTRUCTION.

Nicolas Avellaneda is the son of a respectable citizen of Tucuman, who was Governor of that Province, until beheaded by Rosas. He was educated in Cordova, and came to Buenos Ayres in 1857 to study law. He had scarcely attained his 20th year when he was employed as editor of the *Nacional*, and named professor of civil law at the University. His work on Public Lands, in 1865, attracted favorable notice, and Governor Alsina appointed him Minister of Government for Buenos Ayres. His practise as a lawyer was considerable until he embraced political life. His views on popular education are as advanced as those of President Sarmiento. He is conversant with French and Latin classics, and is studying English. He is only thirty years of age, and is a better writer than orator.

COLONEL GAINZA, WAR AND MARINE.

Martin Gainza spent his early years in Montevideo. His father was a Colonel under Lavalle, and fought in all the campaigns against Rosas, from 1840 till the fall of the tyrant in 1852. The subject of our notice first distinguished himself as a cavalry officer in the civil wars and the Indian frontier service. He owns large estancias near Zarate, and was for some years Commander-in-chief of the National Guards of the Province. He served under the last administration as Inspector of Arms, and was subsequently a candidate for the post of Governor on the termination of Governor Saavedra's period of office.

GENERAL GELLY-OBES.

John Andrew Gelly-Obes, Brigadier-General and Commander-in-Chief of the Argentine army, is said to be a native either of Buenos Ayres or the Banda Oriental, although the family appears of Paraguayan descent. His father was for a time Prime-Minister to the first Lopez (1852) in Paraguay, and when the young Lopez, since President, was sent to Europe on a diplomatic mission near the courts of St. James and the Tuilleries, Mr. Gelly-Obes, senior, accompanied him. The subject of our notice was commander of the Argentine Legion in the defence of Montevideo (1842-51), and subsequently Secretary in the War-office. During the campaign of Cepeda, 1859, he abandoned, for a time, his profession of auctioneer, to assume the command of the National Guards of Buenos Ayres. In 1861 he was made a Major-General, and gave up business. He aided General Flores in the invasion of Banda Oriental, in 1863, and, on the outbreak of the Paraguayan war, was removed from the portfolio of War and Marine, to act as Chief-of-staff to General Mitre. He has since seen some active service in the campaign of Paraguay.

GENERAL PAUNERO.

Wenceslaus Paunero, Argentine Minister at Rio, is a native of Montevideo, and began his military career in 1826 in the campaign against Brazil. In the civil wars of 1828-36, he sided against Rosas and was forced to take refuge in Bolivia, where he made a living as shop-assistant, and afterwards started a newspaper. The Montevidean Government named him Chargé d'Affaires in Bolivia, and during his residence there he married the sister of General Ballivian (afterwards President). In 1851 he returned to the River Plate, to assist in the war against Rosas, and was present at the battle of Caseros, 1852. He served against the Indians till 1858, and was General Mitre's Chief-of-Staff both at Cepeda and Pavon, being made a Major-General on the latter field. He has since seen much service in the civil war with the Chacho, the Paraguayan campaign, the San Juan revolution, &c. He was candidate for Vice-President at the late election, but was defeated by D. Adolfo Alsina. One of the first acts of President Sarmiento was to confide to him the important mission that he now holds.

DON NORBERTO RIESTRA.

Norberto de la Riestra was born in this city in 1825, of Spanish parentage, and when young sent to England for education. He was first employed in a commercial house in Liverpool, and afterwards sent out to take charge of the branch-house in his native city. His eminent financial talents soon shewed themselves, and he was chosen for the delicate task of arranging the Buenos Ayrean debt in London. This business he concluded so satisfactorily that the Bonds at once rose to an unprecedented figure, and he merited the thanks no less of the Bond-holders than of his own Government and countrymen. In 1860 he became Finance Minister for the Province of Buenos Ayres, and on the incorporation of this state with the Confederation was chosen for the same office in the Cabinet of Paraná. But the rupture which soon took place with Buenos Ayres induced him to resign the portfolio and return to this city, where the victory of Pavon found him in his old post, and as confidential adviser of President Mitre he is known to have steadfastly advocated the non-repudiation policy in all matters of public debt, the adoption of which has established our National Credit on a firm basis. Having resigned his seat in the Cabinet, he was soon elected Senator in the Provincial Legislature, and distinguished himself by his labors for the Great Southern Railway, and a scheme for the redemption of paper-money. On the formation of the London and River Plate Bank, the Board secured his influence and advice by naming

him Resident Director. Mr. Riestra may be in many respects almost considered an Englishman, and his sympathies and regard for everything English are well-known. We need not add that he is a strenuous friend of immigration, and of all Anglo-Argentine enterprises. In May 1865, on the occasion of the Paraguayan war, he was sent to London to negotiate a loan voted by Congress, for two and a-half millions sterling: this he concluded at 72½ per cent. although the Home Bonds of the Republic were quoted at the time, at forty-four, in Buenos Ayres. Failing health prevented his presenting his credentials as Plenipotentiary near the Court of St. James.

DON MARIANO BALCARCE.

This gentleman is accredited Argentine Minister near the courts of Paris, London, and Madrid, but he resides within a few miles of Paris. He is married to the daughter of the famous General San Martin, of the epoch of Independence. He belongs to a wealthy family of Buenos Ayres, and is said to be very hospitable to friends or residents coming from the River Plate. His last official business was in connection with the Argentine stall at the Paris Exhibition.

SR. POSADAS, POSTMASTER-GENERAL.

Gervacio A. Posadas is son of the late Supreme Director, Juan Antonio Posadas. In his youth he spent some years in England, where he became acquainted with many leading men, including Sir Rowland Hill and others. He speaks English and French fluently, and has introduced many postal improvements, but, the revenue at his disposal is much too limited, and the premises are wholly unsuitable. No other department shows so much increase as the 'Correo,' the number of letters and papers regularly doubling every two years.

MR. O'GORMAN CHIEF OF POLICE.

Enrique O'Gorman is descended of an old and respectable French family whose ancestors were, of course, Irish, as the name indicates. He is an active and intelligent official, but the present police department is a relic of the old Spanish system, quite inadequate to the necessities of the time.

CHAP. XII.

MINING IN THE CUYÓ PROVINCES.

SAN JUAN.

To the indomitable energy and untiring perseverance of the actual President of the Republic, H.E. Dr. Don Domingo F. Sarmiento (during his Governorship of San Juan), is due, in a great measure, the rapid development of the mining industry in this province. In the year 1862 he had the mining districts examined by Major F. I. Rickard, F.G.S., &c. (engaged in Chile for that purpose), and in sight of his various reports, and impartial statements, a Limited Liability Company was established in San Juan, with the small capital of $110,000s., destined to be the pioneer undertaking in developing the hidden riches of Tontal, distant some thirty leagues S.S.W. from the city.

Although the mines of La Huerta, fifty leagues to the N.E., had been some time previously in operation, and a crude system of smelting had been essayed by the owners of Santo Domingo, the political disturbances and constant changes in the administration precluded the possibility of their being worked to advantage. The ores were rich in silver, and of a plumbiferous nature, with a tolerably fusible gangue; but, with such appliances as existed at that establishment for the extraction of the precious metals, and the want of knowledge and practice on the part of the owners or managers, large deficits resulted instead of gain. The smelting works were consequently abandoned, and the mines only kept partially worked, awaiting brighter times.

Meanwhile, a Frenchman, who had been employed in the works as smelter, erected a small blast furnace a short distance from the mines, on the site now occupied by the Messrs. Klappenbach, who purchased his miserable attempt at a metallurgical establishment, in a good round sum. They have, however, completely remodelled it, and now possess works—small, it is true, but still sufficiently perfect for the object for which they are intended. The system employed is similar to the old method adopted in former years at Pontgibaud, Puy-de-Dôme, France, but now obsolete and replaced by another far superior, by the Anglo-French Company.

As no official statistics can be obtained, it is very difficult to estimate correctly the annual produce of silver from the La Huerta mines; all of which, however, passes through the Messrs. Klappenbach's hands. Since the year 1863, the mining industry in the district has been gradually improving, and is still advancing. Santo Domingo has lately had some splendid «alcances» or bunches of rich ore, with native silver visible, and silver glance in fair abundance. The general impulse given by the Messrs. Klappenbach is now bearing fruit, and numerous old mines are being resuscitated and worked with profit. The annual produce of silver from the Messrs. Klappenbach's works may be set down at about 7,000 marks Spanish, or about 51,800 oz. Troy, whose value in Buenos Ayres may be taken in round numbers at $70,000 s.

The Tontal district, rich in «dry» non-plumbiferous silver ores, is much more abundant than La Huerta, but the nature of the accompanying gangue, which is invariably silicious, presents many difficulties to the metallurgist, in the course of operations necessary for the extraction of the silver. But, in order to counterbalance, as it were, this mistake of nature, another new district, a little to the north, was discovered in 1864, yielding abundant supplies of galenas (sulphides of lead), as also carbonates and sulphates, together with other combinations, all more or less plumbiferous, and highly necessary as a flux or medium by which to extract the precious metals from the refractory dry ores of Tontal. This new district is Castaño, about twenty-five leagues from Tontal, in a north-westerly direction towards the Cordillera, and some fifty leagues N.W. from San Juan.

The beginning of 1864, saw the commencement of the metallurgical establishment at Hilario, belonging to the already mentioned limited company, distant some seven leagues from Tontal and twenty from Castaño, agreeably situated on the border of the San Juan River called at this point Los Patos. This spot was selected by Major Rickard, the manager, as being best suited for the works, owing to the facility of obtaining water power for the machinery, the abundance of firewood necessary for the furnaces, and

above all as being the only fertile and inhabited valley in the whole district where pasture for animals and the necessaries of life are obtainable.

A great drawback, however, existed, namely, its isolation from all the highways of traffic, and entire absence of anything like transitable roads. Heavy machinery for crushing and amalgamating the ores was necessary, and those pieces which could not be made sufficiently light for transport on mules, had necessarily to be taken up on carts. Here lay the difficulty—Hilario is separated from San Juan by three lofty ranges of mountains; that of Tontal, on the actual mule track, being at an elevation of 12,117 feet above the sea. Narrow defiles and impassable gorges traversed by mountain torrents, intercept the route at various points, and make the idea of forming a cart road there, the wildest dream of impossibility. This insurmountable difficulty was however overcome by taking a very circuitous route to the north; and, by traversing some fifty leagues of extra march, a road was made, partly by the Government and partly by the Company, which, if not macadamized and level, was sufficiently transitable for lightly laden carts. But alas, the freight on machinery from San Juan to Hilario almost exceeded the amount paid on it from Liverpool to San Juan.

In April 1864 the limited Company got short of funds, and it was found that the capital was too small. Major Rickard then came forward and offered to purchase all the shares at par and continue the works for his own account, with the ulterior view of forming an extensive company in London. His offer was accepted, and towards the close of 1865 the Hilario works began to extract silver and silver lead in large quantities. During about ten months of active operations some 250 tons of lead and 9,000 marks of silver were produced and remitted to Europe for realization.

In addition to over 200 employés at the works, including wood-cutters, charcoal-burners, muleteers, and peones, upwards of 500 were employed in the mines of Tontal and Castaño, and solely in those belonging to Major Rickard.

At the same time, large numbers of miners worked mines on their own account, and in all over 100 were at one time in active exploration. Hundreds of tons of ore were produced, and lay at the mines' mouths, ready for transmission to the works; but, unfortunately, the means of transport were fearfully inadequate to the production of ore, or even the requirements of Hilario. The furnaces alone were capable of smelting six tons per day, and the amalgamation machinery of passing through four tons more; yet the daily deliveries of ore only reached about three tons on the

average. Hence, the works, and European staff of expensive operatives, were more than half the time idle, waiting for ore which lay in abundance at the mines, but could not be transported to Hilario. In vain were the rates of freight raised, until almost double their normal or just value. The muleteers could not be persuaded or induced to abandon their accustomed haunts on the Pampa, and bury themselves in the Andes. The industry and undertaking were new in the province, on such an extended scale; the routine and habits of centuries had been disturbed by the busy, and not to be defeated Anglo-Saxon. Order, discipline, and industrious habits, as engendered and exacted by Europeans in matters of business, were distasteful to the indolent, easy-living, and independent denizens of the South. But, alas! in this country these are not the only evils against which Industry has to struggle and do battle.

The spring of 1866 saw the flame of civil war and revolution kindled in Cuyo, and the unbridled passions of the masses obtain full sway in society. This fatal barrier to the progress of civilisation and industry, coming at a moment so critical, served to complete the ruin of the mining prosperts in the province. The mines were abandoned by their owners, who fled in numbers across the Andes, seeking refuge in Chile. The peons and workmen fled to the towns, too eager to join in the orgies of their fellows, and accumulate in a day, by their vandalism, more than the gains of a whole life dedicated to honest toil! Muleteers sought refuge in the mountain fastnesses, amongst unfrequented streams, where sufficient pasture could be obtained for their mules, and in order to save them from the general confiscation decreed by the vandalic hordes on the plains! All these circumstances together were too much for a new industry to withstand—and so Hilario was obliged to suspend operations. Later on, when tranquillity was restored in the interior, the works were resuscitated on a small scale, and so continued up to recently, when a new English Company having been formed for the purpose, it proposed to take over the concern, mines, &c., and re-establish work on a large scale. The arrangements are now being carried out, and the coming year, 1869, will see the industry, probably in a more advanced state than at any period heretofore. The mines are as abundant as ever, and are capable of producing much, but capital and intelligence are sadly wanting on the part of the owners.

In Tontal an unproductive band of blende (sulphide of zinc) has appeared at a depth of sixty yards, and it has not as yet been passed in those mines where active work is being carried on. The inducement to cut through this mass of ore is however very great, as it is almost certain a rich deposit of precious metal exists beyond. Indeed we have almost a proof of this

from old workings followed up in the province of Mendoza on same range of mountains, where the blende has been passed and rich silver ore cut, producing up to 500 marks per cajon (three tons).

The workings actively carried on now at Tontal are few, comparatively speaking, but the yield of good ore is as proportionately abundant as ever—many more mines would be worked if a convenient market could be found for the produce; hence all are anxiously on the *qui vive* for the resuscitation of Hilario by the new company «The Anglo-Argentine» with a capital of $250,000s. (limited).

The geological formation of Tontal mineral district proper, is almost exclusively clay-slate, and the ores raised may be divided into three classes as follows:—

1. Plumbiferous ores (principally galenas) yielding from 100 to 150 marks per cajon of 6½ quintals, or more or less 245 to 368 ozs. Troy, to the English ton of 20 cwt. The silver exists chiefly as Sulphide, Arsenide, and Antimonide. This class is not very abundant.

2. Dry refractory ores or 'pinta' of the class known here as 'calido,' containing a fair share of chloride of silver; but they should not be properly classed as 'calidos,' because there exist in their composition arsenides and antimonides of silver, termed 'frios'—they also hold some sulphates and carbonates of lead; are fairly abundant and yield from 50 to 90 marks of silver per cajon, or 123 to 220 ozs. Troy to the English ton.

3. The same as 2nd class, but of much inferior percentage in silver, and almost entirely free from lead. Very abundant, and averaging from 15 to 45 marks per cajon, or from 37 to 110 onz. to the English ton.

The Castaño district is almost the opposite to Tontal as regards the composition of its ores. The greater part of them are highly plumbiferous, but are wanting in richness of precious metal. They may be classed like those of Tontal into three kinds. The geological formation of Castaño is much broken up and confused, but the principal ore bearing rocks are porphyritic.

1. Galenas, or sulphides of lead. Very pure, holding up to 80 per cent. of lead, and from 10 to 20 marks of silver per cajon. Abundant, some veins over three yards in width. In depth, the same blende bands have appeared as in Tontal, but unlike those, are, to some extent, auriferous. Will probably cut good ore in greater depth.

5. Sulphates, and carbonates, with molybdates and chromates of lead. The former very abundant, and hold from 60 to 70 per cent. of lead, and from 8 to 10 marks of silver per cajon, or from 19 to 24 ozs. to the ton.

3. Ferruginous, and cupriferous silver ores proper. The former non-plumbiferous, and holding from 10 to 30 marks per cajon, highly charged

with oxide of iron, which serves as a flux in furnace operations. The latter contain some lead, and yield from 25 to 80 marks silver per cajon, fairly abundant, but not docile in the furnace owing to the copper being combined with manganese.

The above ores received the Bronze Medal in the Paris Exhibition, 1867 awarded to Major Rickard. (Messrs. Klappenbach's also received a similar reward for the ores of La Huerta.) The complete collection sent from Hilario contained 85 specimens, and exhibited the ores in all their stages of treatment from the crude state to the refined silver.

Having described the mining districts of the west, and their produce we will now proceed to enumerate and give some description of the metallurgical establishments for 'beneficiating' the ores, as they exist at the present time; as also describe the various processes in operation for extracting the precious metals.

As we have already observed, the Messrs. Klappenbach employ the now obsolete system of Pontgibaud, but, although it is no longer used at that place, it is no reason why it should not be introduced and continued here. For we must bear in mind that, in nearly all industrial progress—in the interior at least—we are almost a century behind Europe. Still in some instances, it may be preferable to use antiquated systems here, requiring less skilled labour, and consequently less costly to carry out.

The ores, as delivered at Messrs. Klappenbach's (and at all the works, as a rule), are simply handpicked, and subjected to no other previous dressing; hence it is that they contain a large amount of foreign matter, frequently deleterious, and undoubtedly prejudicial to the facile extraction of the silver. Their fineness varies from lumps the size of walnuts to that of small peas, but rarely or never finer. To this defect must be attributed the extra trouble and cost of smelting; for, were the ores ground and mixed into a homogeneous mass previous to their introduction into the furnace, the time, labour, fuel, and general cost, would be perhaps reduced one third, and undoubtedly the results obtained in precious metal would be materially altered in favor of the metallurgist.

As it is, a mixture of galenas with 'dry' ores is made in the proportion of from $\frac{1}{4}$ to $\frac{3}{4}$ the former to $\frac{1}{2}$ and $\frac{1}{4}$ of the latter. This is introduced into the ordinary single soled reverberatory furnace (at La Huerta) and calcined at a low heat at first, and gradually increased, until all the volatile matters, such as sulphur and arsenic with some of the antimony (should the ores contain it) are driven off, when the fire is increasingly continued, and the mass run into a liquid slag. This is run out on one side of the furnace and when cold is broken up and carried to the deposit for calcined ore.

The next operation is that of smelting or fusing this calcined ore with fluxes in the 'blast furnace.' A proportionate mixture is made for this purpose, consisting, more or less, of say, 100 parts of calcined ore from previous operation, 15 to 20 parts of oxide of iron, and from 7 to 10 parts of raw limestone. Sometimes a quantity of rich blast furnace slags is added. This mixture is passed through an upright blast furnace (rectangular) in intimate contact with the fuel (charcoal) which acts as a powerful reducing agent. During the twenty-four hours, about 16 to 20 quintals of calcined ore are smelted in each blast furnace, of the class used at La Huerta, and the products are—a hard lead, holding nearly all the silver present in the ore—a crude matt, or regulus of lead and copper, with sulphur and antimony, and slags. These latter, if poor, are thrown away; if rich in lead and silver are mixed with fresh portions of calcined ore, where they serve as flux, and yield up their metallic contents on being again passed through the furnace.

The matt being a sulphide of lead with copper and antimony, &c., holds invariably some silver, and is roasted in the reverberatory furnace, either alone or with ore, and again passed through the blast.

The hard, or work lead, is taken to the deposit until sufficient be accumulated to refine, say, from one to two hundred quintals.

The refining is conducted in a circular cupelling furnace (known as the Continental system) where nearly all the lead is charged at once, and the heat gradually raised to a bright red, when the oxidised lead or litharge is melted and begins to flow over the surface of the metallic lead. A nozzle of sheet iron coated with clay, is then introduced at the back of the furnace, and a strong current of air directed over the surface. This drives off the litharge and other impurities which keep rising and accumulating, by the oxidizing influence of heated atmospheric air. A slit is now made on the marl furnace bottom (the top of which rises slightly above the surface of the metallic bath around the sides), in the doorway, opposite the blast nozzle, and the fused litharge, &c., thus finding a channel, begins to flow off slowly. This is continued until all the lead and the greater part of copper, iron, antimony, &c., are oxidized, leaving a plate of impure silver on the bottom of the cupel furnace. This plate is removed when cold, and placed in another furnace of similar construction, but much smaller, and having a bone-ash bottom firmly beaten in, where it is melted, and the action of the fire and oxidizing influences of the air are allowed full scope for a sufficient time to thoroughly purify the silver. When this is done, the furnace is allowed to cool, the solid plate removed, and is thus sent to Buenos Ayres.

The Messrs. Klappenbach use bellows moved by mules, as there is not sufficient water power available to drive a blowing machine or fan. They have an almost inexhaustible supply of firewood in close proximity to their works, which are the only ones at present in active operation in the eastern districts of the Province.

We will now pass to the western districts, or those of Tontal and Castaño.

In all, there are four metallurgical establishments—three in operation and one abandoned. They are respectively—

1. Messrs. Babié & Co., Castaño; cost and capital invested about $30,000 Bol.

2. Don Rafael Fragueiro, Calingasta; say $2,000 Bol.; abandoned.

3. La Sorocayense, Don Anjel Riera; about $15,000 Bol.

4. Hilario, Major F. Ignacio Rickard (Anglo-Argentine Co., Limited); cost and capital invested $400,000 Bol.

(1). Messrs. Babié & Co.'s works are situate close to the Castaño mines, on the river of that name, and are exclusively smelting works, on precisely the same principle as those of La Huerta, having been originally built by an ex-employé of that establishment. They consist of two small blast furnaces—a wretched attempt at a calcining or reverberatory furnace—and, ditto, cupelling or refining furnace. They have a horizontal water wheel, with about eight feet head, and may get, perhaps, 6-horse power effective. Their blowing apparatus was formerly two pairs of bellows, but now consists of an ordinary flat-bladed circular fan, incapable of producing a sufficiently strong blast, owing to its faulty gearing and unsteady movement of the driving wheel or drum, which is sixteen feet in diameter by six inches wide, driving with a three-inch belt on to an inch and a-half pulley, fixed on the axle of the fan! Their annual production of silver will scarcely reach 2,000 marks, and much loss of precious metal must be sustained from the imperfect and careless system pursued about the works. Their proximity to the Castaño mines and firewood are, however, their great redeeming points, and thus they are enabled to work with comparative advantage.

(2). The works of Don Rafael Fragueiro were only capable of treating ores by amalgamation, hence only those known as «calidos» or holding chlorides, chloro-bromides, bromo-iodides, or native silver, could be treated with advantage, and as few of the ores of the district contain their silver exclusively in these combinations, the speculation, in a commercial, as well as metallurgical point of view, was a failure. They are now completely abandoned, and the old amalgamation barrels may be seen

strewn about on the heaps of relaves or tailings, becoming every day more useless from exposure to the scorching sun and dry atmosphere of this elevated valley.

(3). La Sorocayense.—Leaving Señor Fraguciro's works, and proceeding south up the valley of Barrial or Calingasta, about three leagues distant, is situate Hilario, and about two leagues still further south in the same valley, on the Tontal road, are situate the works enjoying the rather unique and to many unintelligible name above expressed. Its derivation is traceable to the system of amalgamation used, and which has its origin in a small place in Bolivia named Sorocaya.

The system employed is properly amalgamation; but the ores are previously subjected to a species of calcination with common salt, having for its ostensible object the conversion of the silver into chloride, and thus rendering it extractable by amalgamation with mercury. This end is not, however, by any means satisfactorily attained, owing to the nature of the ores treated; still, a fair amount of silver is extracted, averaging about six marks, or forty-five ounces, daily. The ore is ground very fine by edge-runners, and passed through a sieve having 3,600 holes to the square inch, after which it is calcined for from five to eight hours in a reverberatory furnace, with about five per cent. of common salt, at a very low temperature, and kept constantly turned and stirred to prevent agglutination. It is then withdrawn, and when cold, is charged into an oblong trough about twelve feet by four, and four deep, accompanied by mercury, where it is gently agitated by a cylinder having a horizontal motion, and kept in intimate contact with the mercury for several hours; when finished, the mass of ore (called tailings) is washed off by water and conveyed into large pits or deposits, where it is allowed to settle, and is again, when dry, subjected to a further calcination, in case it should have retained sufficient silver to pay expenses of treatment. The mercury in the trough, now charged with silver, is drawn off and strained through canvass bags, in which a rich amalgam of silver, combined with about six times its weight of mercury, remains. This is subsequently pressed hard, and placed in an iron retort, connected with a condensing apparatus, where the remaining mercury is distilled off by heat and recovered, leaving the now almost pure silver in a beautiful white porous mass, which may be fused into ingots and sent to market. This silver is, however, rarely so pure as that obtained by smelting the ores with galena, and refining the argentiferous lead.

(4). Hilario.—These works are situate in the valley of Calingasta, Tontal district, thirty-three leagues S.S.W. by W. from San Juan city, and forty-eight leagues N.N.W. from Mendoza, in lat. 31 deg. 20 min., S., and long.

69 deg. 90 min. W. from Greenwich, at an elevation of 5,624 feet above sea level, are the largest metallurgical works in the Republic, and adapted to both systems, smelting and amalgamation. The machinery for the latter was made by Messrs. John Taylor and Sons of London, and consists, in part, of barrels on the Freyberg system, and 'tinas' on the Chilian system. The full working power or capacity of both, may be set down at ten tons of crude ore in the twenty-four hours. The motive power is a large turbine with thirty-three feet head, and discharge pipe two feet six inches in diameter. The effective horse-power may be set down at ninety-five. To this turbine is also geared the grinding machinery, edge-runners and a small extra blowing fan.

But by far the largest and most important part of the works is dedicated to the smelting and refining with their attendant ore, charcoal and wood deposits. The ground actually occupied by the establishment covers over twelve acres, not including the houses, stores, &c., for peones, occupying a street without the works.

The system of smelting followed at Hilario has some resemblance, as a whole, to Messrs. Klappenbach's, but is, in detail, very different. It is in fact as nearly as possible the same as the present improved system carried out at Pontgibaud, France, managed by Messrs. J. Taylor & Sons, the celebrated mine agents of London. The ores, mixed in certain proportions, are calcined 'dead' in a reverberatory furnace of peculiar construction having a 'double' sole, on one of which is completed the agglomeration and fusion into a liquid slag, care being taken that no reduction to metallic lead takes place. The smelting or fusion of this roasted ore is conducted in the class of blast furnaces known as the Castillian furnace, having three 'tuyères' and large capacity. Each furnace is capable of smelting, of tolerably fusible ore, up to six and eight tons in the twenty-four hours with a consumption of about sixty quintals of charcoal. Two sets of three men are employed at each furnace in shifts of twelve hours each set, and are paid—the foreman (English) $60 B. a month, the second hand $30 B., and the third $20 B. per month; all without rations, but with house accommodation and fuel.

The blowing machine is a powerful fan five feet in diameter, driven up to 1800 revolutions per minute by a twenty-five horse power turbine, with 33ft. head and 2ft. 1in. diameter discharge pipe. The wind from this fan is sent to different parts of the establishment, partly in pipes and partly by cemented brickwork flues, so as to be available for the silver lead refining furnaces and the forge fires.

The argentiferous lead produced from the Castillian furnace, being hard,

is first 'improved' or softened in an improving furnace of the reverberatory class, and when freed from any copper, antimony, arsenic, or iron, which may have been reduced with it, is refined direct on a bone-ash cupel or test by what is known as the English system, silver is thus obtained by one cupellation up to 995-thousandths fine.

I should here observe that Pattinson's process of crystallising out pure lead and concentrating the silver for refining, as practised at Pontgibaud and other works, is not used at Hilario. But this omission is by no means prejudicial; on the contrary, very little, if any, advantage would be derived by its adoption there, because the argentiferous lead produced direct from the blast furnace averages over one per cent of silver, and it is a recognized fact that any attempt at enriching lead, by Pattinson's process, beyond 2 per cent. has commercially failed. Hence the concentration is rarely carried beyond this figure, and the system is only adapted where there are large quantities of poor lead produced, which would be unprofitable to refine direct.

At Hilario there are three furnaces of the reverberatory class, with one refining furnace on the English system, and two Castillian blast furnaces. The ore deposits are capable of storing over a thousand tons, divided into compartments with tiled floors, and numbered. Each compartment having its Dr. and Cr. account in a separate book for entries from mines and deliveries to the furnaces, hence at a glance it may be determined what stock remains on hand, and how much has been worked up, without the trouble of re-weighing.

The Chemical Laboratory for analysis and assays by the humid method is a complete department in itself, and most perfectly fitted up.

In succession follows the weighing room with its fine assay balances indicating up to the 1000th part of an English grain; also large bullion balances for weighing the silver in ingots, with the corresponding sets of stamping numbers and letters in steel for marking their weight and fineness. Next to this room is the assay laboratory proper, with its rows of miniature furnaces and muffles, for assaying and experimenting on the ores by the 'dry' methods; here, when in full work, up to 100 assays are made daily.

In the same range of buildings are the carpenters-shop and smithy, separate, for all sorts of repairs and work necessary about the establishment. Turning lathes, drilling machines, and the various tools necessary for mechanical engineering, may be seen about, for, being isolated as the works are, in the heart of the Andes, it is essential to have all these conveniences for any emergency which might arise.

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The charcoal, delivered at the furnace house, costs 20 cents per quintal of .000 lb. made by contract with natives who cut and carry the wood from the camp, preferring to make it at the works, although apparently much more advantageous to them to make it where the wood is cut, and thus reduce the weight carried by 70 per cent.

The manager, however, prefers the charcoal made at the works, as in the first place it is produced under an immediate supervision, and is delivered almost intact, thereby avoiding the waste of a large percentage of small coal totally useless, and highly injurious in the blast furnace.

The manufacture of firebricks, also forms a most important feature in the works; for were it necessary to import from Europe or Chile this indispensable and largely consumed article, the cost would be very great. Fire-clays abound in the neighbourhood, and by a careful selection, the mixture used at Illiario, affords a very excellent refractory brick, well suited for lead furnaces.

They are made by dry pressure, and some turned out during the present year at a cost of $20 Bol. per thousand have been used in a blast furnace which ran 178 days without a single brick having to be replaced. The cost of best Stourbridge fire-bricks (Ruffords) imported from England and placed at Illiario, is about 40 cents each, or $400 per thousand.

Beyond the immediate precincts of the works but forming part of the property are several houses, in which are general dry goods and provision

stores, baker's and butcher's shops, as also a café or hotel with billiard room, &c., rented to outsiders, and forming a most essential part of the establishment. When in full work, the concourse of miners, employés, ore vendors, muleteers, &c., which accumulate, is sometimes astonishing, and the occupiers of these houses make a fair business on their own account. Some distance from the works is a grass farm rented for the use of the animals required about the establishment.

The tariff for the purchase of silver ores, delivered at Hilario, is as follows (Bolivian currency):—

From	20	to	30	marks	per	cajon	of	64 quintals	$3.50
Do.	31	to	40	do.	do.	do.	do.	do.	4.00
Do.	41	to	50	do.	do.	do.	do.	do.	4.75
Do.	51	to	60	do.	do.	do.	do.	do.	5.50
Do.	61	to	70	do.	do.	do.	do.	do.	6.00
Do.	71	to	80	do.	do.	do.	do.	do.	6.25
Do.	81	to	90	do.	do.	do.	do.	do.	6.50
Do,	91	to	100	do.	do.	do.	do.	do.	6.75
Do.	101	to	150	do.	do.	do.	do.	do.	7.25
Do.	151	to	200	do.	do.	do.	do.	do.	7.50
Do.	201	to	300	do.	do.	do.	do.	do.	7.75
Do.	301	to	400	do.	do.	do.	do.	do.	7.87½
Do.	401	to	600	do.	do.	do,	do.	do.	8.00
Do.	601	to	800	do.	do.	do.	do.	do.	8.12½
Do.	801	to	1000	do.	do.	do.	do.	do.	8.25
Do.	1000	upwards		do.	do.	do.	do.	do.	8.50

Per mark of pure silver.

The Messrs. Babié & Co.'s tariff differs considerably from the above as they base their calculations on a different system of working. They deduct, in the first place, from every cajon of fifty quintals fourteen marks of the silver contained therein, and pay for the remainder at the rate of $10 bol. per mark of pure silver, according to assay.

MENDOZA.

Although this Province, during Spanish rule, was celebrated for its mineral wealth, and large quantities of silver were annually extracted from the ores produced in the Paramillo de Uspallata, it has so degenerated in metallurgical and mining enterprise, that were it not for a few energetic and persevering individuals, now toiling in the old mines of that district, it scarcely merits a passing notice in this work.

In the year 1865, the Paramillo mines were visited by the Government Inspector General (Major Rickard), and after a careful examination he resolved to make a few trials, by cutting in great depth, by means of adit levels, some of the celebrated old veins which produced rich ore in former times. Operations were commenced in company with Don Eustaquio Villanueva, a resident there, and up to the breaking out of the revolution in 1866, the workings produced fairly, although not yet into the workings of the Spaniards. Of course all was paralysed during the Federals' sway, and Mr. Villanueva was obliged, like many others, to seek refuge in Chili in order to save his throat and his purse. Whilst in the sister republic he formed the acquaintance of Señor Don Antonio del Canto, a Chilian miner and copper smelter of much experience, whom he induced to come over and examine the mines.

Early in 1867 operations were commenced by these men, following up the adits commenced in 1865, and re-establishing various old workings on other veins, including some copper deposits. Señor del Canto formed the project of smelting copper ores at the mines, and producing, by a proper admixture of the silver ores, an argentiferous regulus of copper, which commands a high price in Europe. This idea had the advantage, if realized, of utilizing the immense quantities of poor silver ores, which in their crude state are almost valueless; the high rates of freight, to an available market, rendering their export commercially impossible. His object was, therefore, to concentrate, by a series of fusions with copper ores, the silver contained in them, and thus, raised to a high standard, in small bulk, realize them with profit.

Many difficulties, natural to the district and country, generally presented themselves, but with praiseworthy determination, this industrious Chilian, we are glad to say, has so far, surmounted them. The weary Andine traveller is now relieved of the tiresome monotony presented by barren, desolate wastes, on his route to Chile, by the sudden and almost magical appearance of a well constructed copper furnace, with its slender chimney, towering some 40 feet above the mountain gorge, and the orderly, civilised aspect of a neat row of buildings perched on the side of a steep hill.

The great drawback of the undertaking is the scarcity of fuel; very little wood, or more properly brushwood, is to be found on the barren hills in the vicinity. But Mr. Canto has determined to utilise as an auxiliary fuel, the bituminous shales (erroneously termed coal by the natives) which abound within a few yards of his furnace grate. These hold about 25 to 30 per cent. of combustible matter, but the immense accumulation of ash

on the fire bars renders it a most troublesome and difficult matter to regulate the temperature of the furnace.

The result of the first trials, with this fuel *per se*, almost caused him to abandon in despair the idea of using it; but later on, necessity obliged him to revert to it again, and we are now informed that by using 50 per cent. of wood he can maintain a good temperature. He has to adopt two fire places for each furnace; the one permanent for wood, and the other moveable and further in, for the shale. Thus, when a grate full of this stuff has given off all its combustible matter, the bulk still remaining the same, he is obliged to remove the bars bodily, and discharge the useless slates into the ash-pit to make room for another charge.

He has already produced a fair amount of argentiferous copper regulus holding 150 marks per cajon, or 368 ozs. silver to the ton, with from 30 to 40 per cent. of copper. This sells in Valparaiso (at the present time) for about $1,200s. per cajon of sixty-four quintals, and consequently pays well.

The mining operations proper, have of late produced some very rich ore, in the old workings commenced in 1865 by Major Rickard, with the view of passing the unproductive blende bands (similar to those of Tontal) where they have cut silver ore in fair abundance, holding over a thousand ounces to the ton, thus bearing out the theory of expected riches, in depth, on the Tontal lodes which exist on the same range further north, and in somewhat similar formation.

We are authentically informed that Messrs. Canto and Villanueva have some $20,000 Bol. worth of rich ore, now on surface, awaiting the opening of the Cumbre pass to remit to Chile. They have some 200 miners and others employed in the Paramillo, together with about twenty miners on a copper ore vein some thirty leagues south of Mendoza, whence they are obliged to bring the necessary fluxes for smelting, and form the regulus at the works in the Paramillo.

The capital invested in mining in Mendoza at the present day does not exceed $50,000 Bol., but should the Paramillo works continue to improve, it is reasonable to expect a proportionate increase in speculative enterprise.

The Paramillo mines and works are situated about twenty-three leagues W.N.W. from Mendoza, on the high road to Chile, via Uspallata and La Cumbre pass. Their elevation above the sea is not less than 10,000 feet, and the cold, nearly the whole year round, is most intense.

The only potable water available, near the works, are two small springs, which are made the most of by accumulating their water in large tanks of solid masonry.

The south of the Province is said to be very rich in minerals, but the Indians take good care that their territory is not violated by the white man; hence the hidden treasures of the earth in those districts must remain to tempt the cupidity of a future and more adventurous race. A specimen from San Rafael, lately found, has proved on examination by Major Rickard, to be a new species: it holds 70 per cent. of copper combined with antimony.

Extensive deposits of an impure petroleum exist about seventy leagues from the city, south, but from their isolated position and want of roads, must for the present remain commercially worthless.

SAN LUIS.

The only mining industry, at present developed, in this Province, is gold digging and washing, if we except a puny attempt at copper smelting lately essayed by a German, who, we are told, tried to make an auriferous regulus of copper by direct fusion of carbonates, silicates and oxides of that metal, having (we suppose) forgotten the important sulphurous compound.

We have no authentic data as to the value of gold produced at the present day: but according to official returns corresponding to the year 1865, it appears that there were 137 miners employed on eight mines, and had produced 800 marks of gold, valued at $89,600 bol.

We are informed that some very productive quartz veins are now being worked by a few Chilian mining adventurers, and with fair returns; but as they have only recently begun, no correct idea can yet be formed of the enterprise.

The gold usually produced from the washings is of a very inferior quality, rarely passing .750 pure gold in a thousand, the remaining .250 being mostly silver.

The mining districts are situate towards the north of the Province, distant from twelve to eighteen leagues from the capital.

In conclusion, there exists a vast field for speculative enterprise in the Cuyo Provinces, where the industry may be said to be yet in its infancy. And, with the bright prospects of national prosperity, advancement, civilization, and peace, which the Republic now enjoys, beneath the popular rule of her distinguished President, the fullest development of her hidden treasures is to be hoped and looked for.

His Excellency, *Governor* Sarmiento, initiated the pioneer mining enterprise in San Juan. His Excellency, *President* Sarmiento, is still in time to prune and train up the tender 'vine-shoot,' and by the genial sun of his protecting influence, make it bear the much desired fruit.

He has already, we believe, taken an important step in this direction, by naming a person to proceed in commission through all the provinces and report extensively on the mineral resources of the country. Once this report shall have been handed in to the Government, important projects will be laid before Congress, tending to the development, not only of the mining, but other staple industries of the Republic.

F. IGNACIO RICKARD, F.G.S., &c., &c.
Government Inspector General of Mines.

Hilario, San Juan, October 12, 1868.

THE SAN JUAN MINING AND SMELTING WORKS.

In September 1864 Messrs. F. S. Klappenbach commenced their operations in mines and the construction of the Argentino Smelting Works in the Mineral de la Huerta, distant thirty-five leagues from San Juan and seventy leagues from Cordova. Lat. 31.30, Long. 67.16 W. of Greenwich.

The establishment had been in course of construction since 1865, and now in the beginning of this year all the necessary works have been completed.

In its present condition 40 cajones or 100 tons of ore can be smelted in the establishment, per month.

The situation is one of the most favorable for the enterprise, being surrounded on all sides to a distance of twenty leagues by woods. Also there exist in the immediate neighbourhood, deposits of coal, iron, lime, salt, clay for firebricks, and other necessaries.

The result of the smelting during the construction of the establishment has been as follows:—

In 1865,	....	....	1416	marks of	pure silver.	
In 1866,	....	....	4766	do.,	do.,	do.
In 1867,	....	....	6201	do.,	do.,	do.
In 1868,	....	....	6589	do.,	up to August.	

and 3200 qq. of lead.

The produce of this year would have been considerably greater had it not been for the total paralyzation of the works for three months during the prevalence of the cholera.

The mines continue increasing in richness as they proceed, and the ores which are principally composed of «galenas» give even the highest ley of silver with small quantities of native silver.

The common ley of all the ores received and smelted in the establishment was up to 1866 fifty-five marks of pure silver to the cajon (or 50 qq.) of ore, equal to 176 oz. silver to one ton of ore.

In 1867, sixty-two marks pure silver, equal to 198 oz. to one ton of ore; and the ley has increased this year to seventy-six marks pure silver to the cajon, equal to 272 oz. of pure silver to one ton of ore.

Messrs. F. S. Klappenbach and Co. have lately changed their society into a company in Buenos Ayres called the «San Juan Mining and Smelting Co.,» capital $230,000s., divided into 230 shares of $1,000s. each.

The following gentlemen form the Board of Directors, &c.—

Constant Santa Maria,	....	....	....	President.
F. Wanklyn,	....	....	....	Director.
H. Ebbinghaus,	....	....	....	do.
H. Heberard,	....	....	....	do.
J. Aldao,	....	....	....	do.
A. Scharff,	....	....	....	Secretary.
F. S. Klappenbach,	....	....	....	Manager in S. Juan.

The future of the company is most promising, entering as it does into a field of action already explored and prepared for it, in which it will have but to reap the fruit.

The mines of La Huerta, whose richness and abundance are well recognised, only require hands to give brilliant results, giving new elements of greatness and prosperity to the country, and at the same time offering scope for the formation of new and greater undertakings.

CHAP. XIII.

HISTORY AND LITERATURE OF RIVER PLATE.

HISTORICAL RECORD.

1515—River Plate discovered by Juan Diaz de Solis.
1527—Sebastian Cabot explores the Paraná and Uruguay.
1530—Buenos Ayres founded, under invocation of the Holy Trinity.
1531—The fort and settlement destroyed by the Indians.
1535—Second foundation by Pedro de Mendoza: also destroyed.
1537—Asuncion del Paraguay founded by Ayola.
1544—Irala greatly extends the Spanish dominions.
1553—Santiago del Estero founded by Aguirre.
1555—Arrival of the first bishop, Francisco la Torre.
1559—Garcia de Mendoza founds Mendoza and San Juan.
1565—Villaroel founds Tucuman.
1573—Cabrera founds Cordova.
1573—Juan de Garay founds Santa Fè city.
1580—He marks out the city of Buenos Ayres, June 11th.
1582—Lerma founds Salta,
1588—Corrientes founded by Alonzo de Vera.
1591—Velazco founds Rioja, and, in 1592, Jujuy.
1596—Loyola founds San Luis.

1609—Jesuit missions of Paraguay founded by Padres Mazeta and Cataldini.

1622—Jesuit missions along the upper Uruguay.

1628—Paulista Indians carry off 60,000 captives from Misiones.

1680—Colonia founded by the Portuguese.

1726—Montevideo founded by Zavala, Governor of Buenos Ayres.

1730—Spain cedes Misiones to Portugal; Indian settlements broken up.

1767—Expulsion of the Jesuits; destruction of the Misiones.

1776—Viceroyalty of Buenos Ayres created, under Pedro de Zeballos.

1782—Census; Buenos Ayres territory, 170,832 inhabitants, and Paraguay 97,480.

1806—English invasion under General Beresford, who capitulates.

1807—Second invasion, under General Whitelocke, who also capitulates.

1808—Liniers named Vice-roy.

1810—Revolution of Buenos Ayres, May 25th.

1811—Belgrano invades Paraguay, and capitulates.

1812—He beats the Spaniards at Tucuman and Salta.

1814—Spanish garrison expelled from Montevideo.

1815—Campaign of Artigas in Banda Oriental.

1816—Declaration of Argentine Independence, at Tucuman, July 9th.

1818—General San Martin beats the Spaniards at Maypu, and emancipates Chile.

1821—He liberates Peru, and enters Lima in triumph.

1821—Banda Oriental annexed to Brazil.

1825—Revolution of Lavalleja and thirty-two others.

1825—Fructos Rivero beats the Brazilians at Rincon Gallinas.

1826—Buenos Ayres declares war against Brazil.

1826—Admiral Brown chastises the Brazilians.

1826—Rivadavia introduces many reforms.

1827—Alvear beats the Brazilians at Ituzaingo.

1828—Brazil gives up Banda Oriental, and makes peace.

1828—England guarantees the independence of Banda Oriental.

1830 to 1852—Civil wars, and tyranny of Rosas.

1852—Rosas overthrown by Urquiza.

1853—Urquiza expelled from Buenos Ayres.

1856—Introduction of gas.

1857—Western Railway inaugurated; the first in these countries.

1859—Battle of Cepeda: Buenos Ayres capitulates.

1860—Buenos Ayres re-enters the Argentine Confederation.

1861—Dreadful earthquake at Mendoza.

1861—Battle of Pavon: gained by General Mitre.
1862—Northern Railway works commenced.
1862—General Mitre unanimously elected President.
1863—Flores invades the Banda Oriental.
1863—Inauguration of Central Argentine Railway works at Rosario.
1864—Brazil invades the Banda Oriental.
1864—Southern Railway, to Chascomus, begun.
1865—Montevideo surrenders.
1865—Paraguay declares war.
1865—Boca and Ensenada Railway opened to Barracas.
1866—The Allied army (Argentines, Brazilians, and Orientals) invade Paraguay.
1866—Electric cable laid across the River Plate.
1867—Siege of Humaitá.
1867—Government-house at Buenos Ayres twice burned.
1868—General Flores murdered at Montevideo.
1868—Paraguayans abandon Humaitá.
1868—Water-works begun at Buenos Ayres.
1868—Don Domingo F. Sarmiento elected President.

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Muratori's missions. (English translation). London, 1759.
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La Confederation argentine. By M. de Moussy. Paris, 1860.
The Argentine Republic. By Colonel De Gerdy. Brussels, 1861.
Republic of Paraguay. By the same. Brussels, 1862.
M'Cann's Guide to Montevideo. Price, 2s. 6d. London, 1862.
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Hutchinson's Argentine Gleanings. Price, 16s. 6d. London, 1866.
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Hadfield's Visit to La Plata. Price, 10s. 6d. London, 1868.

RIVER PLATE NEWSPAPERS.

Buenos Ayres.

The *Tribuna* was established in 1854 by Hector and Mariano Varela, sons of the distinguished writer D. Florencio Varela. It is the first paper in the River Plate, as regards influence and circulation. It appears every morning; subscription $40 a month. Circulation 5,000.

The *Republica* was established in 1867 by Mr. Bernheim, and has been very successful as an experiment of a cheap press. It appears every morning; subscription, $25 a month. Circulation, 4,000.

The *Nacion Argentina* was established in 1862, by Dr. José Maria Gutierrez, and was regarded as the official organ of General Mitre's administration. It appears every morning; subscription, $40 a month. Circulation, 2,000.

The *Nacional* is the oldest paper in Buenos Ayres, having been established in 1853. Among its editors, at various times, have been General Mitre, Pres. Sarmiento, Dr. V. Sarsfield, Dr. Avellaneda, and other leading public men. It appears every evening, subscription $40 a month. Circulation, 2,000.

The *Standard* was established in 1861 by Michael and Edward Thomas Mulhall, being the first English daily ever published in South America. It has three editions, the *Daily* for Buenos Ayres and Montevideo, the *Weekly* for the country departments, the *Fortnightly* for Europe: subscription for Daily $30, for Weekly $200 a year; Fortnightly £1 a year. Circulation, 3,000.

The *Courrier de la Plata* was established by M. Legout in 1864, as the organ of the French population. It appears every morning; subscription, $30 a month. Circulation, 1,200.

The *España*, a tri-weekly organ of the Spanish residents.

The *America*, a new daily paper; subscription, $30.

The *Deutsche Zeitung* was established in 1866, its present editor being Mr. Napp. It appears every morning; subscription, $30 a month.

The *Nazione Italiana* was established in 1868, by Dr. Bianchi. It appears every morning: subscription, $30 a month.

The *Intereses Argentinos* is a paper of a religious character. It was established in 1868; subscription, $30 a month.

The *Mosquito* is a weekly 'charivari,' illustrated. It was established in 1863; subscription, $20 a month.

The *Revista de Buenos Ayres* is a valuable monthly periodical, established in 1862, by Drs. Navarro Viola and Quesada; subscription, $30 a month.

The *Revista Argentina*, established in 1868, by José M. Estrada, is similar to the last. Appears fortnightly; subscriptions, $30 a month.

[illegible] is a monthly [illegible] gazette, published by the [illegible].

[illegible].

The [illegible] was first established in [illegible] but suppressed by Government in the following year. It re-established in [illegible] under E. Vallent, and is now edited by Sr. [illegible]. It appears every morning; subscription $2 a month. Circulation [illegible].

The *[illegible]* was established by [illegible] in [illegible], and is edited by [illegible]. It is considered the official paper. It appears every morning; subscription $2 a month. Circulation [illegible]. There is an evening edition called the *[illegible]*.

The *[illegible]* is an old established shipping gazette, published every afternoon by [illegible].

The *[illegible] de Plata* was established in [illegible], and appears every morning.

The *[illegible]* is a morning paper, edited by Sr. [illegible].

The *Progreso* is a small evening paper, also of recent date.

[illegible].

The *Capital* is a daily paper, established in [illegible].

The *Federalista*, also new, appears likewise daily.

Cordoba.

The *Eco de Cordoba* is the only daily paper in the interior.

Entre-Rios.

The *Uruguay* published at Concepcion, is edited by Sr. Victorica. It is considered General Urquiza's official organ, and appears daily.

Paraguay.

The *Semanario*, official organ, appears weekly at Asuncion.

The *Cabichuy*, is a weekly 'charivari.'

There are numerous small weekly papers published in the provincial towns, viz.: at San Juan, Mendoza, Salta, Tucuman, Corrientes, Parana, Santa Fé, Salto, Paysandú, Colonia, *&c.*

CHAP. XIV.

MONEYS, WEIGHTS, MEASURES, AND DISTANCES.

BUENOS AYRES.

In Buenos Ayres the basis of the currency is the paper dollar or «peso,» worth 2*d*. English, 25 «pesos» being equal to a hard dollar, such as used in North America. In all exchange operations, and the like, only specie is used, the sovereign being taken for $4 90c. silver, or for $122½ paper. The gold coins of England, North America, France, Spain, and Brazil are a legal tender throughout the Republic, at the following rates:—

	Silver.	Paper.
Sovereign,	$4.90	$122½
Twenty Francs,	3.90	97½
Chilian Condor,	9.25	231¼
Twenty Milreis,	11.00	275
United States Eagle,	10.00	250
Doubloon,	16.00	400

In the upper provinces almost all transactions are carried on in Bolivian silver, the value of which slightly fluctuates at times. The Bolivian dollar averages about 3*s*. English, or twenty-one to the doubloon.

The weights and measures are—

1 Arrobe,	equal to	25℔	1 Vara,	equal to 34 English inches.	
4 Arrobes,	do.,	1 Quintal.	1 Cuadra,	do.,	150 Varas.
20 Quintals,	do.,	1 Ton.	40 do.,	do.,	1 League.
80 Arrobes,	do.,	1 Ton.	6000 Varas,	do.,	1 League.
2000℔,	do.,	1 Ton.	1 Sq. League,	do.,	6500 Eng. acres.

It will be seen that a Spanish ton is 240℔ less than an English ton. The Spanish league is vulgarly taken to represent three miles, but it is fully three and a-quarter miles. The cuadra, in measuring land, is always 150 varas, but some of the provincial towns are built in cuadras or blocks of 100 or 120 varas. In calculating distances, twelve cuadras may be estimated as an English mile. The superficial cuadra covers about four acres, and is also called a «manzana:» there are 1,600 «manzanas» in a square league of land. A «suerte» of estancia usually measures one and a-half leagues long, by half a league wide, comprising 27,000,000 square varas: a square league of land contains 36,000,000 varas.

MONTEVIDEO.

Before the suspension of specie payments, 1867, the currency was fixed on the basis of a dollar worth 52*d*. English, or 4 per cent. more than the North American dollar. At present, October 1868, the currency is at a discount of 15 per cent.; but the former value of the currency, in relation with foreign currency, was—

	Montevidean $.		Montevidean $.
Mexican dollar, ...	0.96	Twenty Milreis, ...	10.56
Sovereign, ...	4.70	United States Eagle,	9.60
Twenty Francs, ...	3.~~74~~ 60	Doubloon, ...	~~15.60~~ 15.36
Chilian Condor, ...	8.~~88~~ 80		

The weights and measures are the same as in Buenos Ayres; but the cuadras in the city are only 100 varas square. The French metrical system is being gradually introduced, and building lots are sometimes sold by the metre, which is three inches longer than an English yard. In measuring land the cuadra is fixed at 100 varas, so that a league is said to be sixty cuadras long, and a superficial league to contain 3,600 manzanas: of course the league is exactly the same length as in Buenos Ayres.

PARAGUAY.

Before the war the currency of the country consisted partly of doubloons and partly paper dollars, all accounts being payable by law in half and half. The paper dollar, in 1864, was worth about half-a-crown English, or

twenty-five to the doubloon; say 64 cents. silver. No foreign coin had circulation in the country.

The table of weights is the same as in Buenos Ayres. The land measure is very different—

1 League, equal to	5,000 Varas.	1 Manzana, equal to	1½ Eng. acres.
1 Cuerda, do.,	83⅓ do.	1 Sq. League, do.,	25,000,000 sq. v.
1 League, do.,	60 Cuerdas.	1 Sq. League, do.,	4,500 acres
1 Sq. League, do.,	3,600 manzanas.		

TABLE OF DISTANCES FROM BUENOS AYRES.

	Spanish Leagues.		Spanish Leagues.
London,	2,500	Cape San Roque,	920
Lisbon,	2,200	Rio Grande do Sul	150
Cape Verde,	1,550	Montevideo,	40
Pernambuco,	850	Bahia Blanca,	200
Bahia,	700	Welsh Colony,	350
Rio Janeiro,	450	Falkland Islands,	450
New York,	2,300	Magellan's Straits,	600
St. Thomas,	1,800	Cape Horn,	680
Pará,	1,250		

River Paraná.

Rosario (S. Fé)	75	Esquina,	180
Santa Fé,	117	Goya,	210
Paraná,	115	Bella Vista,	230
Californian Colony,	150	Corrientes,	260
La Paz,	160		

River Paraguay.

Tres Bocas,	265	Salvador,	420
Humaytà,	275	Rio Appa, mouth,	440
Rio Vermejo, mouth,	278	Siete Puntas,	450
Villa Pilar,	280	Pan de Azucar,	460
Tebiquary, mouth,	290	Fort Olympo,	475
Villa Franca,	300	Rio Negro, mouth,	500
Villa Oliva,	315	Fort Coimbra,	510
Asuncion,	340	Albuquerque,	530
Rosario,	365	Curumbá,	555
San Pedro,	380	Cuyabá.	610
Concepcion,	400		

Upper Paraná.

Paso la Patria, ...	270	Falls of Curitiba,	400
Falls of Apipé, ...	310	Rio Tacuari, mouth,	425
Tranquera de Loreto,	315	Salto de Guayra, ...	450
Itapua & Candelaria,	335		

River Uruguay.

Fray Bentos, ...	20	Santa Rosa, ...	140
Rio Negro, mouth,	40	Uruguayana, ...	160
Gualeguaychú, ...	50	La Cruz, ...	180
Concepcion, ...	70	Itaqui, ...	182
Paysandú, ...	80	Santo Tomé, ...	207
Concordia, ...	108	San Borja, ...	208
Salto, ...	110		

Upper Provinces.

Frayle Muerto, ...	100	Hilario works, ...	255
Rio Cuarto, ...	130	Rioja, ...	250
Cordoba, ...	150	Catamarca, ...	260
San Luis, ...	170	Tucuman, ...	270
Mendoza, ...	225	Santiago del Estero,	220
The Andes, ...	240	Salta, ...	310
San Juan, ...	245	Jujuy, ...	330
Klappenbach's mines,	270	Oran, Rio Vermejo,	350

Province of Buenos Ayres.

South.

Cañuelas, ...	11	Tapalquen, ...	48
San Vicente, ...	10	Sierra Quillalanquen,	62
Lobos, ...	18	Azul, ...	55
Navarro, ...	17	Arroyo Chapaleofú,	52
Guardia Monte, ...	19	Mar Chiquita, ...	66
Ranchos, ...	20	Sierra Tinta, ...	69
Chascomus, ...	24	Cinco Lomas, ...	70
25 de Mayo, ...	35	Loberia, ...	65
Paso de Rocha, ...	27	Cape Corrientes,	78
Las Flores, ...	32	Laguna los Padres,	74
Dolores, ...	39	Necochea, ...	80
Ensenada, ...	10	Arroyo Pillahuinco,	90
Magdalena, ...	19	Tres Arroyos, ...	98
Tuyu, ...	46	Sierra La Ventana,	103
Montes Grandes, ...	50	Bahia Blanca, ...	115
Tandil, ...	60		

North.					
Pilar, ...	....	10	Cepeda,	....	43
Capilla,	....	14	Arroyo Medio,	....	46
Zarate,	....	16	Arroyo Pavon,	....	48
Giles, ...	....	20	Arrecifes,	....	33
San Antonio,	....	21	Fortin Areco,	....	27
Baradero,	....	27	Salto, ...	....	34
San Pedro,	....	31	Pergamino,	....	42
Obligado,	....	35	Rojas, ...	....	43
Las Hermanas,	....	39	Fort Chañar,	....	56
Ramallo,	....	44	Fort Melincué,	....	60
San Nicolas,	....	45	India Muerta,	....	61
West.					
Rodriguez,	....	10	Chacabuco,	....	36
Lujan, ...	....	13	Junin, ...	....	45
Mercedes,	....	20	Fort Rauch,	....	44
Freyre,	....	25	Nueve de Julio,	....	48
Gorostiaga,	....	28	Tigre Muerto,	....	55
Chivilcoy,	....	31	Fort Vallimanca,	....	47
Bragado,	....	39	Saladillo,	....	33

METEOROLOGICAL.

The following are the results of meteorological observations, taken by the aid of one of Messrs. Negretti & Zambra's minimum and maximum self-registering thermometers (Fahrenheit), exposed in the shade during the month of March at Rosario, from April to June at Montevideo, and from July to September at Buenos Ayres:—

	March.	*April.*	*May.*	*June.*	*July.*	*August.*	*Sept.*
Monthly range, ...	51	26	25	28	26	25	18
Greatest diurnal range, ...	43	24	18	21	14	14	9
Average do., do., ...	20	10	9	7	9	7	5
Highest maximum, ...	98	77	71	72	65	66	63
Lowest do.,..	68	57	55	49	48	49	52
Average do.,..	80	68	63	59	54	58	58
Highest minimum, ...	77	67	61	62	50	61	59
Lowest do., ...	47	51	46	44	39	41	45
Average do., ...	64	58	54	51	44	51	53
Mean averages, ...	72	63	59	55	49	54	56

CHAP. XV.

ADVICE TO EMIGRANTS.

WHO TO COME, AND WHO TO STAY AT HOME.

The River Plate offers a fine field for immigrants, as is proved by the thousands of Europeans here who have gained fortune and position during the last twenty years. Yet it sometimes happens that individuals come out to Buenos Ayres, throwing up a good livelihood, and being ignorant of the language and unwilling at first to «rough it,» grow disgusted and return to England sadder but not wiser men. It is, therefore, absolutely necessary to bear in mind the classes of emigrants most needed in a new country:—

1st. Farm servants—unmarried men, of strong constitutions, sober, steady, accustomed to country life, and able to stand rain and sun. Their occupation here would be the care of sheep, and as our flocks make up a total of sixty millions, doubling every four years, at least twenty thousand of this class will find immediate employment at £20 per annum, being found in house, provisions, horses, &c. After two or three years, they usually get a flock of sheep with third profits, and ultimately become independent farmers.

2nd. Cooks and housemaids—unmarried women of good conduct and some experience in house-keeping, although ignorant of Spanish, are much in request. Five hundred would at once get situations in native or foreign families, at £25 to £35 per annum. They often get married to the above class of sheepfarmers.

3rd. Young married couples—when unencumbered with family, this class is in greater demand than any other, and always preferred, on the

ground of steadiness. The husband must act either as sheep-peon or gardener, and the wife as cook. If they hire on an estancia in Buenos Ayres their joint wages may be calculated at £45 per annum, but if they go to Banda Oriental, Entre-Rios, or the other Provinces, they will earn £80.

4th. Speculators—we want some wide-awake, practical men, possessing money and experience. We have no manufactures in the River Plate. We want a paper mill, a woollen manufactory, omnibuses to ply through the city, pleasure gardens, an English theatre, and fifty other enterprises which would handsomely pay the originators.

The above are the classes actually wanted, but some others might possibly better themselves by coming hither. For instance, there is room for half-a-dozen English physicians in the 'camp'; a few mechanics might get good wages in the interior; printers are always wanted in Buenos Ayres; some sober coachmen may also come out, and a good teacher of music or languages will find plenty to do.

It may be needful to specify the classes not wanted—

1st. Lawyers, land surveyors, newspaper reporters, and graduates of universities. The first two are debarred from practising, until they go through a course of studies in the universities of these countries and take out degrees here. This involves three years, and is not worth the trouble. Reporters, if even they knew Spanish, would get nothing to do, there being no meetings, law-trials, lectures, &c., to report. Graduates are proverbially useless, for a man may have Homer and Virgil by heart, and be obliged to sell oranges for a living.

2nd. Clerks and shop assistants. Some of this class come out to seek their fortune and generally return. They are ignorant of Spanish, and therefore both helpless and useless: moreover the English houses bring out their own clerks, and look with distrust on strangers. Half a dozen youths understanding Spanish and their business, might fall into a drapery or grocery, at £60 a year. As a class, however, they are not wanted.

3rd. Unemployed gentlemen. If these men have sufficient money to buy a flock of sheep, it is likely they will get disgusted, and sell out at a loss. If they have not, they are out of element, not willing to work hard, and desiring some lucrative post which they would be unable to fill.

4th. Tradesmen with large families. Most handicrafts being exercised by French, Italian, or Spanish operatives, it is not likely an English tailor, bootmaker or carpenter would find wages so much better than at home, comparatively with the value of money in both countries, as to be worth

the change. If he has a few hundred pounds, to start for himself, he may possibly get on, but if he has a large family and no ready money, he will find himself much worse than at home.

5th. Fast young men. If there were a law prohibiting the importation of this class, it would be a service to the country and to themselves. The British Hospital and Policia can tell of many locked up for drunkenness, and finally dying in «delirium tremens,» for this climate cuts them off with extraordinary rapidity.

We have now pointed out distinctly the classes which are sure to get on well; and also those which must come here only to be sadly disappointed. If the immigrant has little self conceit, and a good temper, he will find friends everywhere. If strictly sober and honest, he is sure to thrive. It is perfectly immaterial whether he be Catholic or Protestant. A good education is not virtually a disadvantage. The climate is the finest on earth, and persons who come out young speedily accustom themselves. The distance from Europe is very great, and those who cast their fortunes here have little chance of seeing the Old World again, not one in a hundred ever returning. Still the country has so many advantages, and the people are in general so kind, that «home sickness» is hardly known.

STEAM SERVICE TO THE RIVER PLATE.

A few years ago there was but one line of steamers plying to Brazil and the River Plate, viz.: the Royal Mail from Southampton. At present there are seven lines, viz.: the Southampton, Liverpool (2), London, Bordeaux, Marseilles, and New York steamboat services.

1. The Royal Mail Company despatch a steamer on the morning of the 9th of every month, from Southampton, or on the 10th if the previous day be Sunday. This line has been running over twenty years: the vessels are large and commodious. Fares—1st class, £35 and upwards: return tickets, available for twelve months, issued at a fare and a-half; 2nd class, £25, good accommodation; but this class is not allowed to mix with the first or go on the quarter-deck. Bed, bedding, plate, and utensils provided for both classes. A reduction of one-sixth is allowed for families of four or more persons travelling first-class. The steamer calls at Lisbon, Cape Verds, Bahia, and Pernambuco: at Rio Janeyro passengers for the River Plate are transhipped to the Arno. The voyage occupies thirty-one days to Montevideo, and thirty-two to Buenos Ayres. For regulations about luggage, &c., see the company's pamphlet, given gratis on application, either personally or by letter, to Captain Vincent, Superintendent, Southampton; or, to J. M. Lloyd, Esq., 55 Moorgate Street, London, E.C.

2. The Messageries Imperiales, or French mail line from Bordeaux, established in 1861, also carry a monthly mail, leaving Bordeaux on the 25th, and making the voyage in the same number of days as the Southampton line. At Rio Janeyro passengers are in like manner transhipped to the Annis for the River Plate. Few Englishmen come by this line, but if a person wishes to visit Paris «en passant» he can reach Bordeaux from London in two days. The vessels call at Lisbon, Goree, Bahia, Pernambuco, and Rio Janeyro: they are not so large as the Royal Mail Steamers. First cabin, including wine, £50. Second cabin, £20. Office—Messrs. Fletcher & Co., Liverpool, and Messrs. Horne, 4 Moorgate St., London.

3. The Liverpool and River Plate Mail Company despatch a steamer from Liverpool on the 20th of each month, calling at Lisbon, Bahia, and Rio Janeyro, and coming on to the River Plate without any transhipment of passengers: they usually make the passage in twenty-eight days. The treatment and accommodation on board are excellent. The line was established in 1863, and in 1868 obtained a mail charter from the British Government. First cabin, £35. Second cabin, £25. Steerage, £16: the 1st and 2nd classes are found in everything; steerage passengers get rations on the emigration dietary scale. Agents, Messrs. Lamport and Holt, 21 Water St., and Messrs. Wright & Kelso, 7 Tower buildings, Water St., Liverpool. Mr. Lloyd of the latter firm is Argentine Vice-Consul, and will give any information required. The Company's steamers are the following: Tycho Brahe, 1858 tons; Hipparchus, 1810; Kepler, 1499; Galileo, 1525; Newton, 1074; Ptolemy, 1115; Halley, 1347; Donati, 1182; Humboldt, 1346; Cassini, 836; Flamsteed, 1376; Copernicus, 1397; Saladin, 510; Ironsides, 691; La Plata, 1303; La Place, 1194. Reduction for families. Return-ticket, for twelve months, at a fare and a-half.

4. The New York and Brazilian Mail Company despatch a monthly steamer from New York, which calls at St. Thomas's, Pará, Pernambuco, and Bahia, arriving at Rio Janeyro in twenty-four days. The line was established in 1866, and has a subsidy from the American and Brazilian Governments. It is proposed to have a branch line to the River Plate. First class from New York to Rio, £50.

5. The London, Belgium, Brazil and River Plate Mail Company despatch a steamer from London, with English mails, which takes the Belgian mails at Antwerp, and receives passengers for South America at Falmouth on the 3rd of each month. The line was started by Messrs. Tait Brothers, of Limerick, in 1867, and has some fine new steamers with superior accommodation. The City of Rio Janeyro has made one of the quickest passages to Brazil on

record: the other vessels are—the City of Limerick, City of Brussels, and City of Buenos Ayres. The departures are—from London, 28th; Antwerp, 1st; Falmouth, 3rd; arriving at Rio Janeyro in about twenty days, and proceeding to the River Plate without transhipping passengers. Fares, £35, £25, and £16, first and second classes found in everything: the usual reduction for families; return tickets at a fare and a-half. Agents—London, Managing owners, Messrs. Tait & Co.; Brokers, A. Howden & Co. Antwerp, Consignee, B. de Vleeshouwer; Broker, E. L. Isenbaert. Rio Janeyro, Consignee, Thomas Holicombe, Esq,; Broker—— Montevideo, Consignees, Messrs. Zimmerman, Fair & Co.; Broker, J. R. Schwartz. Buenos Ayres, Consignee, Messrs. Zimmerman, Fair & Co.; Brokers, Woodgate Brothers.

6. The Pacific Navigation Company despatch a steamer from Liverpool on the 19th of every alternate month, for Valparaiso, calling at Rio Janeiro and Montevideo; the voyage to the River Plate is made in twenty-four days, the vessels being constructed for great speed. The Company was established in 1868, and has a subsidy from the Chilian Government.

7. The Marseilles line, called «Societé de Transports Maritimes,» despatches a monthly steamer from Genoa, calling at Marseilles, Gibraltar, Bahia and Rio Janeyro, and making the voyage to Montevideo in twenty-eight days. The vessels are large and well appointed, viz.: the Bourgogne. Picardie, Poitou, &c., each 3.000 tons register. Fares: from Genoa. £50, £33, £16—from Marseilles or Gibraltar, £48, £31, and £16. Agents in Buenos Ayres, Messrs. Bonnemason & Heydecker, Calle Bolivar.

There are also sailing vessels, of about 300 tons register, always on the berth at London or Liverpool, to receive cargo and passengers for Montevideo and Buenos Ayres. The passenger fare is usually £13, the accommodation pretty good, and the voyage is made in about sixty days. For particulars apply to Messrs. Nuttall, Mors & Co., Liverpool; or to Messrs. Howden & Sons, 19 Birchin Lane, London.

No passport is required on landing in the River Plate, but if the emigrant has no friends here, it would be well for him to bring a certificate of baptism or other document showing his name and nationality. In receiving letters at the Post-office, taking out a marriage license, receiving money from home, &c. positive proof of identity is of course required, and as passage tickets are often lost, and letters of introduction only used for the moment, an official document is more valuable. Some persons procure a letter from the Foreign Office to our diplomatic or consular representatives, but it is hardly worth the trouble, and leads, at best, to an invitation to dinner.

As to letters of introduction they are useful, and as many may be brought as choice may dictate. But let it not be supposed that they will always avail to procure a situation for the bearer. Merchants are often «bored» by a dozen such recommendations, on the arrival of the packet. Irish emigrants should invariably bring letters to the head of their countrymen here, V. Rev. Canon Fahy.

Packing up the trunk is a serious consideration: we advise the reader to provide himself with an abundant supply of clothing and comforts, not only for the voyage, but because they cost here three times their value in England, and may be introduced duty free. They must be bona-fide for personal use and marked with the owner's name, to avoid suspicion of smuggling. A box of kid gloves or roll of silk would be exposed to Custom-house seizure, but shirts and clothing (marked) incur no risk. A gun or revolver, saddle and equipments should not be omitted, and if not required afterwards may be sold at a profit; but no more than one is permitted, and we caution passengers against the false idea of bringing out boots, fire-arms, &c., on speculation. A dozen linen suits will be found useful on board when near the tropics, and always come in well for summer wear here.

LETTERS OF CREDIT.

We should advise emigrants who intend bringing money with them, to do so by means of a Letter of Credit. This may easily be obtained through almost every Bank in England and Scotland, on the London and River Plate, or Mauá Banks of this city, and Montevideo (B. Oriental). And in Ireland from any of the various branches of the National Bank of Ireland which also grants Letters of Credit on the above Banks. The agents in Buenos Ayres of the National Bank are Messrs. Wanklyn & Co.

The above Credits may be obtained for a trifling charge for commission, if the amount be under £500; and if over that sum, we believe free of any charge whatever. The party taking a Letter of Credit will always receive a duplicate, which he should leave at home with his friends in case of his losing the original, or the ship being lost.

This course we can with confidence recommend to our friends as being the best and safest, and one that does not in any way involve the possibility of a loss, whilst by the old and foolish system of carrying gold about the person a man runs the risk of losing it, or being robbed, and if the ship is lost for a certainty loses his money also. Whereas by the Letter of Credit system even should the ship be lost, his friends at home have stil

got the duplicate Letter of Credit, by which they can obtain the money deposited.

INSTRUCTIONS ON LANDING.

Passengers by the mail-steamers are usually landed in a little steamboat, but failing this it will be necessary to take a whaleboat (M'Lean's are the best), and be sure to bargain with the boatman before leaving the ship: his charge will depend on the weather, say $20 to $50 a head. On no account let any of your luggage be separated from you, or you may lose it. Reaching the mole you will be assailed by an impetuous gang of porters; pick out one of them, count for him the number of your trunks, and let him get others to help him if he like: he will charge probably $5 or $10 a trunk to take them to your hotel. At the Resguardo, near the end of the mole, you will have to open your trunk for examination; if you do so with good grace you will find the officials most polite and anxious to save you any trouble. If you have cigars, silks, jewellery, or fire-arms, you had better declare the same. On arriving at your hotel if you have any difficulty with the porters about your luggage, ask the landlord to settle with them. You will find the hotels very cheap and good, the charge for bed and board not exceeding eight shillings a day, unless you take a sitting room, which you will find very dear. Place your card with the number of your room in the frame at the stair's foot. Lock your room whenever you go out, leaving the key with the porter: lock it also at night. If any of your trunks have been detained at the Resguardo or sent to the Custom-house, lose no time to employ Mr. Hill, of 76 Calle Defensa, or some other respectable broker, to clear them for you: the cost will be trifling, unless duties be enforced, in which case they will amount to 23 per cent. on the value of the article.

The change of climate will necessarily oblige you to be careful as to your manner of living. Rise early, take a cold bath every morning, beware of walking about much in the sun, and remember that there are frequent changes of temperature even in one day. Flannel singlets, light clothing and a straw hat are advisable in summer months. At all seasons the mornings are frequently cold, necessitating warm clothing. Be very careful of a cut finger or other trifling wound, which must be kept closely bandaged: it is sometimes very hard to heal a small cut, if the air get into it, and we have unfortunately many cases of lockjaw from a mere scratch not attended to. It is also very bad to drink much cold water, which acts as a purgative on strangers. The most wholesome drink at breakfast or dinner is French wine, for which no charge is made in the hotels. Brandy is too hot for the climate, and must only be taken with extreme moderation:

«delirium tremens,» from the intemperate use of spirits, results sooner in this than in any other country. The meat of the country is good and wholesome, except pork, which you had better avoid, seeing the objectionable manner of rearing swine in Buenos Ayres. In the hotels the usual hour for breakfast is 9 A.M. and dinner 5 P.M. As soon as convenient after arrival you may call at the *Standard* office, 74 Calle Belgrano, where the editors will gladly give you any information or advice in their power. Letters from home may also be directed to their care free of charge. Poor emigrants looking for employment can have advertisements inserted gratis.

New arrivals should be careful about roaming through the streets after 11 P.M., although the city is more quiet and orderly than most large towns. Above all things beware of intoxication, and keep out of the Policia. In the coffee-houses, never make any offensive remarks about the country; it would be ill-breeding, and many of those around you are sure to understand English. If you meet a religious procession either turn into the next street, or take off your hat and stand till it passes by. If anyone ask you for a light for his cigar, present yours to him politely. Remember always that politeness and equality are the rule of the country, and act up to it.

CHAP. XVI.

ITINERARIES FROM ENGLAND AND NEW YORK.

ENGLAND TO BUENOS AYRES.

THE voyage is usually made in thirty days, the distance being about 7,800 statute miles. The outset is often disagreeable, in crossing the Bay of Biscay, but the rest of the voyage is generally delightful, and rough weather is exceedingly rare between Lisbon and Rio Janeyro.

Lisbon is reached in four days from England. The entrance to the Tagus is highly picturesque. Rounding the Rock of Lisbon, and crossing the bar, we get a distant view of Belen, the hills around being covered with a multitude of windmills. On the right is seen a massive building, the Lazarretto; on the left is Fort Julian, a relic of the Moorish epoch. Abreast of Belen we are hailed by the port officials, after which we are allowed to proceed. The panorama of the city becomes every moment more attractive; a crowd of steamers, war-vessels and shipping, line the quays. We land at the Custom-house, in the Terreyro do Paço, or Black-horse Square. The streets of the new town are handsome and spacious, with massive piles of building in regular blocks of about a hundred yards square; the houses are six or seven stories high, and all built of stone. The three principal streets, Rua Aurea, Rua Augusta, and Rua da Prata, run parallel. This was the scene of the earthquake of 1755, when most of the old town, with 40,000 inhabitants, was destroyed. The Marquis de Pombal rebuilt the city. He was Minister to King José I., whose equestrian statue gives name to the Plaza, and the effigy of the Minister is seen in a bronze medallion on the pedestal. The east and west sides of the Plaza are occupied by public departments. The south is bounded by the river, and on the north a triumphal arch gives access to the city.

Englishmen usually stop at the Hotel Braganza, which surmounts one of the seven hills, and is situated close to the Opera-house, in the aristocratic quarter: charge, eight shillings a day. The Rocio terminates the lower town built by Pombal and is flanked on two sides by the Dóna Maria theatre and St. Domingo church. In the centre a monument is being erected to Don Pedro I., who abdicated the throne of Brazil to return to the mother country. In public monuments, plazas, fountains, &c., the city abounds. It may give some idea of Lisbon to say that it comprises 355 streets, 281 travessas or causeways, 12 plazas, 52 plazuelas, 5 public parks, 6 theatres, 200 churches, and 36 public fountains. It contains over 300,000 inhabitants, and enjoys a privileged climate. The traveller should visit the Cathedral, the Abbey of Belen, the Pasco da Estrella, the aqueduct, and the Opera-house. In the coffee-houses may be had capital port-wine at two shillings a bottle. The English book-store is in Rua do Carmo. English Vice-Consul, Jeremiah Meagher. Chaplain, Rev. T. K. Brown. Messrs. Knowles & Co, are agents for the Royal Mail Company, and Messrs. Tait's London line, and the Liverpool and River Plate Company, have also agencies. If the steamer delay more than one day the traveller should drive out to Cintra, 17 miles, one of the most charming spots in the universe. There is now railway communication from Lisbon to Paris, and some people come this way, to avoid the Bay of Biscay. The route is this —Paris to Bordeaux, 12 hours; Bordeaux to Madrid, 20 hours; Madrid to Badajoz, 16 hours; Badajoz to Lisbon, 15 hours. Between Madrid and Lisbon the traveller had better carry provisions.

Four days from Lisbon we pass the Canary Islands, the Peak of Teneriffe rising to a height of 11,000 feet, and being visible at a great distance. Formerly the steamers called here; but the over-zealous quarantine regulations caused the coaling-station to be transferred to San Vicente. The climate of the Canaries is most salubrious, and the scenery interesting: the islands belong to Spain, being governed by a Captain-General, and are sometimes used as a place of exile for turbulent politicians. The late Marshal O'Donnell was born here. The islands produce good wine and fruits: the inhabitants are whites. Lord Nelson fought one of his battles here. Teneriffe is a station on the Cadiz and Havana line of steamers.

When the mail steamers called at Madeira, this was a very pleasant halt for passengers. The island is now sometimes sighted, and can be clearly seen at sixty miles distance: there are three peaks above the town of Funchal, which are of considerable elevation.

The Cape Verde Islands are made in seven days from Lisbon. San Antonio is fertile and mountainous. «Bird Rock» is a conical piece of

granite, tenanted by sea-gulls; and opposite to it is the wretched island of St. Vincent. This is certainly the most barren spot on the world's surface: sundry bold ranges of mountains, but not a particle of vegetation; in its whole extent there is not a blade of grass, not a weed. Two palm-trees near the barrack, and two orange trees on the beach, are sustained in some miraculous manner. The port is spacious and secure; on one side a small fort flying the Portuguese flag, overlooks the shipping; on another, the summit of an adjacent mountain bears a striking resemblance to the head of Washington. Mr. Miller, the English Consul, has a cottage a little above the town, which is a straggling collection of about a hundred houses, built of stone, and a neat little church. There is an English cemetery up the hill-side, and on the beach is the grave of an English colonel's wife, who died returning from India. The water is so clear and blue that the natives will dive for a shilling, and catch it before it reaches the bottom. the boatmen sell some pretty mats and inlaid work-boxes, which come from Madeira. There is also a good supply of fruit from the island of San Antonio, whose rugged and lofty outline is seen a few miles westward. The garrison of the place consists of a company of Portuguese soldiers: the natives are all black, and occupy themselves in coaling the steamers.

From St. Vincent to the Brazils the sea is always as smooth as a mill-pond, and the heat is of course intense, crossing the Line. You see myriads of flying-fish, and now and then a shark or a shoal of porpoises, or the tiny little nautilus with sail before the wind (sailors call it the Portuguese man-of-war). At night the sea is phosphorescent; the moon shines with peculiar brilliancy, and the constellation of the Southern Cross reminds us that we are in a new hemisphere. Passengers should beware of catching cold, and on no account sleep on deck. If they continue their usual morning bath they will find it very relaxing, the sea-water being actually warmer than the atmosphere.

Fernando Noronha is sighted on the seventh day from St. Vincent. It is a small rocky island, used by the Brazilians as a penal settlement, and has a light-house. As we approach the coast of Brazil we see numbers of birds, and the first land visible is Cape San Roque, a bold headland, 200 miles north of Pernambuco.

Pernambuco is the worst port in the world. The mail steamers lie out far to sea, and there is a nasty reef near the shore. When the weather is at all rough, passengers are lowered over the side in an arm chair. The boats are strong, buoyant, and well-manned, but there are sometimes sudden changes in the weather, especially about 1 P.M., which render it both difficult and dangerous for passengers to return aboard. Bathers had better

look out, here, for sharks, which are very numerous. The city has about 100,000 inhabitants, including a few English, and does a great business with England and other countries, in coffee, cotton, &c. It is built on three or four islands, and a fine iron bridge was put up recently, to connect the chief business quarters. A pretty drive may be taken to Olinda: the cab fare is ten milreis (fifteen shillings) for two persons. Royal Mail Company agents, Messrs. Adamson, Howie & Co. British Consul, B. W. Doyle. Vice-Consul, Alexander Gollan. Chaplain, Rev. Charles A. Austin.

From Pernambuco to Bahia the voyage occupies thirty-six hours. The overland journey would take as many days, there being no road through the forests. The distance is under 500 miles. In these waters we meet a number of «catamarans,» the strangest kind of craft ever seen; they sometimes venture over 100 miles from the shore.

Bahia, or San Salvador, is the oldest city in Brazil, and next in importance after the metropolis. The bay is very fine, the vegetation luxuriant; the city stretches along a hill-side, with numerous churches and other massive buildings. The suburb called Victoria is the residence of the English merchants, embowered in gardens, and enjoying the fresh breeze from the Atlantic. On landing the traveller finds a host of palanquins ready to carry him up the hill, but these conveyances, which are borne by two negroes, look so greasy that some people prefer walking. The heat is so great that the best plan is to take a coach and four mules. Drive first to the Botanical Gardens, whence a splendid view is obtained. Then see the old Jesuit cathedral, the Government-house, railway terminus, and post-office: if you have time to drive to the head of the bay, near the Portuguese hospital, it will repay the trouble. More than three-fourths of the inhabitants are colored, and the city is so filthy that foul odours assail one on all sides. There is an excellent coffee-house opposite the post-office. Mail Packet agents, Wilson, Hett & Co. British Consul, John Morgan. Chaplain, Rev. Charles G. Nicolay. There is an English cricket club here. Bahia boasts the largest oranges and the fattest black women in South America.

Rio Janeyro is about 800 miles from Bahia, and the voyage takes nearly three days. The entrance to the Bay of Rio is the grandest picture that ever delighted the eye of man, grand, solemn, and imposing. A chain of wild and dark-colored mountains forms the coast-line; right a-head of us the land recedes, discovering, as we approach, two rocky islets, one of them crowned by a light-house. Presently we begin to descry houses perched here and there among the hills, while the peaks of Gabia, Tijuca, Corcovado, and the Sugar-loaf, frown upon us in over-awing majesty.

At every instant, as the steamer steadily advances into the bay, the scene changes like a kaleidoscope, the mountains seem to move one behind the other, and to change entirely in shape, till we get in full view of the city, with the Organ Mountains in the back-ground, and the middle distance occupied by sundry islands bristling with batteries.

The Sugar-loaf is perhaps the most striking feature in the picture, and rises to a height (almost precipitous) of 3,200 feet: an American lady some years ago climbed to the top. Gabia looks as if surrounded by a castellated building. The peak of Santa Cruz is on the right of the bay, overlooking a fort of granite walls mounting a hundred guns. We pass the British and French flagships, and several other war-vessels. All the navies in the world might ride at anchor in this land-locked bay. Small steamboats are plying in all directions, to the various suburbs along the water-line.

The steamer comes to her moorings alongside Coal Island: the island was formerly used for rearing young slaves. The boatmen here are mostly thorough negroes. The landing place is close to the market, a bustling place, with a very incongruous assemblage. In coming ashore we notice the Arsenal, where some of the ironclads were built for the Paraguayan war. Rio Janeiro is wholly different from any other city: it has nothing South American about it, and nowise resembles the large towns you see in France or Italy. The houses are very high, the streets are as narrow as those of Genoa, and the shops very small, but rich. The vehicles are drawn by mules, and in some streets you have to step into a shop doorway when a coach passes. Black servants in livery abound. The Alfandaga or Custom-house is a fine building, The best hotel is «McDowell's Exchange Hotel»: the same owner has a hotel at Petropolis, a charming place about forty miles up the country. The natives are very polite and understand a person talking Spanish, although their language is Portuguese. The Plaza Constitucion is a very handsome square, with fountains, and in the centre is a tasteful equestrian statue of Peter I., the founder of the Brazilian Monarchy. We are now in the new town; the streets are wide and well paved: the English Company, called the Rio Improvement Company, has done good service here. The convict prison is surrounded with high walls of granite: a little further on we reach another Plaza, where the Lyric Theatre, the Senate-house, and other buildings claim notice. As we get to the outskirts we see the reservoir of the grand aqueduct of Tijuca. The pleasantest excursion from Rio is to Tijuca, which is situate in the mountains, about twelve miles inland. An omnibus leaves the San Francisco square every hour. Numerous charming cottages, sprinkled here and there over a fertile zone of gardens and orange groves,

occupy the line of route as we ascend towards Tijuca. The omnibus stops at a place called Andrahy. Here you can hire a horse or coach to ascend the hill. The road winds round a succession of precipices disclosing at every point the most enchanting views: the gorge below is at times 500 feet perpendicular. There are several country-seats, where the owners reside in summer. The road is first-rate, and at short distances there are gas lamps. The English Hotel is in a hollow, although still at a great height; the proprietor is Mr. Bennett. It would be difficult even in England to find anything to surpass the neatness, elegance, and comfort of this house. Mr. Bennett gets up pic-nic parties twice a week to all the finest points of scenery in this lovely neighbourhood. After seeing Tijuca you should next make a trip to Petropolis. The first part of the journey is made in steamboat, some fourteen miles across the bay; the second is in the Baron Mauá's railway, about sixteen miles, and the rest by diligence. The ascent of the Sierra da Estrella, a branch of the Organ Mountains, is most picturesque. The road is a triumph of engineering skill, the mountain side being almost perpendicular. When you have ascended about a thousand feet you see the road winding zig-zag below you, every bend forming a terrace cut in the rock. There is no possibility of an accident, the road being lined, over the precipice, with a stone wall four feet high. Petropolis is at last reached after a half hour's drive over the table-land lying between two ridges. It is embosomed in the mountains, at a height of 2600 feet above the sea. The mountains rise all around like a barrier, the vegetation is as tall and luxuriant as at Tijuca. Petropolis is the summer residence of the Brazilian Court and aristocracy. The Emperor's palace is a fine massive pile of building, not unlike an Italian nobleman's villa.

The great attraction in Rio is the Botanical Garden, with an avenue of palms that has no match in the world. The drives around by Botafogo, Larangeiras, La Gloria, &c., are very beautiful, and omnibuses ply every hour from the square adjoining the Emperor's palace. In the shops of Rua Ouvidor will be found feather-flowers, beetles, jewellery, and such like articles. The English Consulate is in the Rua Direita, Consul Mr. George Lennox Hunt, who is also agent for the Royal Mail steamers. The English Minister, Mr. Buckley Mathew, resides near Botafogo. The Exchange and Post-office are in the same street as the Consulate and M'Dowell's hotel.

From Rio to Montevideo takes four or five days, according to the weather. Pamperos are not uncommon on this coast. Far out to sea, before seeing land, we can perceive the effect of the waters of the River Plate, changing the color of the ocean. Maldonado is situate at the mouth of the river, and

the navigation is here very dangerous, owing to the bad arrangement of lights. A profitable seal fishery is carried on at Lobos Island. The coast of the Banda Oriental is low and uninteresting till we sight the «mount» which has given its name to Montevideo.

Montevideo is the capital of the Republic of Uruguay, with a population of 70,000 souls. The city, as seen from the bay, looks to advantage, the towers of the Matriz Church, and the Custom-house and Caridad Hospital being conspicuous. The best hotels are the Oriental and Americano, charge. 9s. per day. Strangers are admitted to the Club: they will find the *Daily Standard* at the agency, Mr. G. Behrens, 103 Calle Zavala. Fully three-fourths of the inhabitants are foreigners, including a number of English and German merchants. There are numerous fine buildings, especially the Bolsa, where the merchants meet at two P.M., every day. The River Plate Telegraph Co.'s office is in the same building. There are drives to the Paso Molina, Buschenthal's quinta, and a tramway to Union. The Rev. Mr. Adams reads Divine service at eleven o'clock on Sundays, at the English Church. The British Hospital is a small building near the fort. The Government-house is in Calle Rincon. Major Munro is British Vice-Consul. Mail-packet agent, Mr. Charles, 50 Calle Castellanos; Tait's line, Mr. Schwartz, 103 Calle Misiones; Liverpool steamers, Mr. Charles Horne, 213 Calle Cerrito.

The steamers leave Montevideo in the evening and arrive at the outer roads of Buenos Ayres by daybreak. The minarets, church towers, and cupolas give a light and fantastic appearance to the city, which, seated some eighty feet above the western shore of the La Plata, extends about two miles along the water's edge and forms an irregular quadrangle of 500 cuadras, or 2,000 acres, area. On near approach, the various public buildings can be clearly discerned, rising from the crowd of minor edifices. In the centre of the picture is the Custom-house, with a wharf stretching some 600 yards into the river. On the right are seen—the belfry of La Merced, the Capitania del Puerto with a flagstaff, the fine edifices of Don Felipe Llavallol and Don Juan Anchorena, and at the extremity of the line of beach the gas-house, close to which are the terminus of the Northern Railway and a battery of four guns, *à fleur d'eau*, used for salutes. In the back ground of the centre we see the clock-tower of the Cabildo, the roof of Colon Theatre, and the porcelain cupola of the Cathedral; while further to the left rise the towers of San Francisco and Santo Domingo, and on a slight eminence stands San Telmo. The view is bounded by a low strip of coast edged with luxuriant vegetation, in the midst of which the Riachuelo stream debouches into the Plata.

NEW YORK TO BUENOS AYRES.

The mail steamer leaves New York on the —th of each month for the Brazils, calling at St. Thomas. From New York to St. Thomas is about 1,600 miles English, and the voyage usually takes six days.

St. Thomas is one of the Virgin Islands, recently sold by Denmark to the United States, and situate thirty-eight miles east of Porto Rico. Area, 24 square miles; population, 12,560. The surface is elevated and rough, highest in the centre. It was formerly well wooded; but the cutting of the timber has subjected it to frequent and severe droughts. The soil is sandy and not very fertile: about 2,500 acres are under cultivation, the principal crops being cotton and sugar. St. Thomas is open to the commerce of all nations: it is a depot of goods for the adjacent islands, and is becoming an important packet station. It is visited by 3,000 vessels annually. Capital, Charlotte Amelie.

From St. Thomas's to Pará (Brazil) the distance is nearly 1800 miles. The town of Pará, or Belem, is situated on the river Guama, which flows into the estuary of Pará, about 70 miles from the Atlantic, in lat. 1.34 S., and long. 48.50 W.: population 28,000, including 4,000 slaves. The climate is hot, being almost under the equator, but not unhealthy. The streets are well laid out and paved. The houses are not generally high, but they are substantially and often elegantly built. The town boasts a handsome cathedral and several churches, a governor's palace, a college, schools, hospitals, a botanic garden, a theatre, and a law-court. The anchorage is safe and roomy, and with the exception of two shoals at the entrance of the river, is easy of access. The approach to the town is commanded by a small fort. The principal exports consist of cocoa, india-rubber, rice, nuts, and hides. In 1856, 5,000,000lb of India-rubber were exported. The total value of exports during the year 1858-59, was $1,050,048, of which no less that 42 per cent. was shipped to the United States. The imports from the United States for the same year were valued at $542,379, and consisted of manufactured articles, lumber, flour, &c.

Cape San Roque is distant a thousand miles from Pará. After doubling this cape, we have yet 200 miles before reaching Pernambuco, and from this last port the rest of the voyage is the same as the route from England to Buenos Ayres. The total distance from New York to Rio Janeyro is nearly 6,000 miles. At Rio, the passengers wait for the French or English mail-steamers, to proceed to the River Plate; but, it is likely the American Company will soon establish a branch-line to Montevideo.

SECTION B.

CHAP. I.

THE CITY OF BUENOS AYRES.

Buenos Ayres is in many respects the finest city in South America, although second to Rio Janeyro in trade and population. In every other respect it stands first in this Continent. Being situated in S. Lat. 34.29, W. Long. 59.12 it enjoys a delightful climate, and is the most eligible residence in Spanish America. The first settlers called it Santisima Trinidad de Buenos Ayres, and it still preserves the cognomen of «good air,» which it so well deserves. It covers a superficies of almost 2,000 acres, forming a parallelogram whose longest sides are east and west, and cut up like a chess-board, in blocks 150 yards square. When laid out by the early Spaniards, the streets were made only thirty-six feet wide, and the houses had no upper story. Since 1860 a rage for building has prevailed, and now we see splendid edifices of three or four stories in every street. The streets are called «calles,» and the public squares «plazas;» the former are eighty-three in number, of which thirty-one run from the river-side due West, and fifty-two from North to South. The pavement and side-walks are bad and irregular; the city cannot yet boast street-drainage, but is being provided with water-supply, and is well lighted with gas. There are eleven parishes, containing sixteen Catholic churches,

Besides some chapels of ease, and four Protestant churches. There are two city hospitals supported by the Municipality, and four of foreigners, belonging to the English, French, Italian, and Irish communities. The theatres are three in number, besides a handsome Concert-hall. The Custom-house offices are large, but a part of this edifice is now used as the National Government house. The Provincial Government house is close to the University, to which latter are attached the Museum and State Library. Five markets, for the daily supply of the city with provisions, are placed at convenient distances; and the Plazas 11th September, and Constitucion are the great wool-markets for the North and South districts of the camp. The two killing-grounds or «abattoirs» are situated in the extreme outskirts of the Recoleta and Convalecencia: the former locality is remarkable for the city cemetery, and the latter for the new and commodious Lunatic Asylum. The Protestant or English burial-ground is situate in Calle Victoria. Hotel accommodation is cheap and good, there being three superior, and five second-rate, houses, in which the charge varies from five to ten shillings per diem. The stranger finds himself at once at home in Buenos Ayres, as he can procure entrée by a visitor's ticket to all the clubs and societies in the city. As yet we have no public park, but there is a project to turn Palermo, the late residence of Rosas, into a species of Champs Elysées. The number of English houses is large, and the merchants constitute the most respectable class in the society of the city; English families (including Americans) are about 1,000 in number. There are five resident English physicians, and ten or twelve good English schools. The police department is imperfect, there being only some 200 vigilantes for the total city service. There is a barrack in the Plaza Retiro, the garrison being usually about 600 men. The artillery magazine in Plaza Parque contains some historic pieces of large calibre. The National Guards are drilled on Sundays during a few months in the year. Most foreign nations are represented by a Minister and a Consul, as vessels of all flags, and people of almost every country, are found in this port. The British Legation is in Calle Parque: at the Consulate, 121 Calle Mayo, is the English post-office. The French Consulate serves for a post-office to the Bordeaux monthly steamer.

The Foreign Club, in Calle San Martin, is the usual rendezvous of visitors, who merely require to have their name put down by one of the members. The native Clubs are fashionable and brilliant, but mostly used for balls: foreign visitors can easily procure invitations.

The Cathedral is one of the finest buildings in the continent, and the church services on great holidays are solemnized with becoming splendor.

There are two convents of friars, and two of (native) cloistered nuns, which escaped the suppression of religious orders after the Independence. The French Sisters of Charity have numerous institutes and schools, and the Irish Sisters of Mercy have a school and hospital.

The National and Provincial Governments, both, reside in the city, and act in perfect harmony. The Municipality, composed of a dozen leading Argentines and foreign residents, has its Town-hall at the Policia.

The Bolsa or Exchange is in Calle San Martin, and here the visitor will meet all the business men of the city, native and foreign. The Commercial Rooms, next door to the Capitania, supply the latest shipping intelligence, and possess first-rate telescopes and a reading room. The Casa de Moneda or Bank of the Province is the headquarters of our paper-money. The Mauá Bank was the first private bank in the city, established in 1858. The London and River Plate Bank, established in 1863, does a large and remunerative business. The Argentine Bank is of recent date.

The Argentine General Post-office, Calle Bolivar, is directed by Don Gervasio Posadas. The chief Courts of Law are in the Cabildo, Plaza Victoria, in the tower of which is the new town clock. The Congress-hall, open from May to November, is in Plaza Mayo, beside the Custom-house.

Each parish has a Justice of Peace, and male and female public schools. The inhabitants are generally well educated. There are ten daily papers, six Spanish, one English, one French, one German, and one Italian. Foreigners enjoy the fullest immunities, but have of course no representation or voice in the Legislature.

There are few cities that have made such progress as Buenos Ayres in the last ten years. In 1859 we had six miles of railway; at present we have 200 miles, on the Northern, Southern, Western and Ensenada lines. In 1859 there was but one line of ocean steamers; now there are seven lines from England, France, Belgium, Italy and the United States. In 1859 there were but two Banks: at present there are four. In 1859 the newspaper circulation was 3,000 daily; it now amounts to 20,000. In 1859 the population was 100.000, just half the present estimate. In 1859 there was not a single English joint-stock company, nor an insurance office, in the country; to-day it would be difficult to number them. In 1859 the number of immigrants was 4,700; at present the returns shew 30,000 per annum. In 1859 the business of the Post-office comprised 400,000 letters and papers; at present it is nearly 4,000,000. In 1859 the Customs revenues were about £200,000; now they exceed £2.000,000 sterling. The same increase is observable in every branch of industry or enterprise.

Tramways are about to be established throughout the city and suburbs,

the following lines being either projected or in course of construction. 1. From the Custom-house, along Calle Rivadavia, to the Plaza Once de Setiembre; 2. From Plaza Parque to Plaza Monserrat; 3. From the Plaza Constitucion terminus to the Plaza 25 de Mayo; 4. From Plaza Libertad to Plaza Victoria; 5. From the Cinco Esquinas to the village of Belgrano. On the first first four lines the uniform charge would be $1, the proprietors paying the municipality 20 per cent. of the gross receipts, for use of the streets.

The suburbs of Belgrano, San Fernando, Flores and Barracas are pretty, and studded with charming country seats. The Western Railway is open (100 miles) to Chivilcoy, the Northern (20 miles) to the Tigre, the Great Southern (75 miles) to Chascomus, and the Ensenada line (3 miles) to Barracas. Pleasant boating excursions may be made to Las Conchas, the islands of Carapachay, and the delta of the Parana. There is almost daily steam communication with the river ports, and diligences ply to the various camp towns. The mortality of the city is thirteen daily or twenty-four per mil per annum. Immigration, 2,500 monthly. Municipal income, £120,000 per annum.

Buenos Ayres is the grand centre of communication between this part of South America and Europe. The traveller may here book himself for any of the river ports in the Parana or Uruguay, or for the upper provinces of the Interior, or for the more distant republics of Paraguay, Bolivia, or Chile. He may even take a steamboat trip 2,000 miles up the river, into the interior of Brazil, passing Asuncion. Or if anxious to visit the Indian tribes of Patagonia, he will find monthly steamboat communication with Bahia Blanca and Rio Negro. As a place of residence for the visitor or invalid, no city in this hemisphere has superior attractions. The climate is healthy, and there are a variety of public amusements, fashionable and enlightened society, a healthy atmosphere of progress, and an almost weekly mail from Europe.

CHAP. II.

HOTELS, CLUBS, THEATRES, AND PLAZAS.

HOTELS.

THERE are three first-rate hotels, and several of lesser note—

Hotel de la Paix, 56 Calle Cangallo, contains nearly 100 apartments, well ventilated. The «mirador» is one of the highest objects in the city, and commands a splendid view. English, French, and Spanish spoken. The proprietor, M. Marechal, has also a «maison meublée,» called Hotel San Martin, next the Bolsa, where visitors who purpose making a long stay will find suitable rooms with board. Charges vary from $50 to $120 (8*s*. to £1) per day, according to accommodation.

Hotel du Louvre, 95 Calle San Martin, is a new house, elegantly fitted up, and the charges are much the same as at La Paix. English and other languages spoken.

Hotel du Provence, 25 Calle Cangallo; very comfortable, and much frequented by English. Madame Boch is very attentive to families. This is one of the oldest and most respectable houses in town. Charges, $40 a day, and upwards.

Hotel del Globo, 38 Calle Mayo: an Italian house, well kept, with a fine view of the roadstead. Charge, $40 a day.

Hotel de Paris, 43 Calle Mayo; much frequented by Frenchmen; the dining-saloon overlooks the beach, good cuisine. Charge, $40 per day.

Hotel de Europa, 53 Calle Mayo, established in 1809, much frequented by Dutch ship-captains; good board and attendance. Charge, $35 per day.

The *Victoria Hotel*, Mr. John Geoghegan proprietor, 21 Calle Corrientes. This house is the rendezvous of Irish sheepfarmers when they come to town.

Furnished apartments, without board, may be obtained at the Universelle, 102 Calle San Martin; the Ancla Dorada, 76 Calle Cangallo; the Maison-meublée, No. 2 Calle Mayo; Mrs. Whittaker's, 77 Calle Mayo; Mrs. Summer's, 82 Calle Parque; Mrs. Stafford's, 190 Calle San Martin; Mr. Lewis, 146 Florida, and other respectable English houses, all of which are kept with the utmost neatness. The charges usual are—bed-room and parlor $800 to $1,200 (£7 to 10£) a month; bed-room, with attendance, $300 to $700 a month. Unfurnished rooms may be procured at $200 to $500 a month, and young men sometimes prefer taking lodgings with a native family, in order the quicker to learn Spanish. If the stranger wish to take a house, he will find it difficult to get one in a hurry, but must patiently advertise and wait. The best localities are the Plaza Retiro, Drabble Row, Plaza Parque, Whitfield's quintas, and Ludlam's terrace (Calle Defensa): rent, from $1,500 to $3,000 a month.

CLUBS.

The *Foreign Club*, No. 36 Calle San Mártin, was established in 1841, its first President having been the head of the well known firm of Thomas Duguid & Co.: it was then situate on the site before occupied by Faunch's hotel, and which is now the English book-store of Messrs. Mackern. The present new building is elegant and commodious. The reading-room is probably the best in South America; there is a good billiard-room, and the coffee-room and cuisine are in English style, with reasonable charges: the other apartments are to match, the only drawback being that the premises are small, and command no view from the front. The slate in the hall contains the latest maritime intelligence, and the saloons are crowded at every hour in the day with the merchants of the city. The original number of subscribers was 150, but is now 274. Entrance fee, $2,000; subscription for town residents $70, for country residents $35 per month. Foreign ministers, consuls, officers, and clergymen are admitted as honorary members. Visitors' tickets, available gratis for three months, may be procured by application to any of the members; such tickets may be prolonged four months more, by paying the monthly subscription.

The *Club del Progreso* was foundod, May 1st 1852, by Messrs. Diego Alvear, Rufino Elizalde, Gervasio A. Posadas, and Juan Martin Estrada. Foreigners were admitted as members, and a spirit of social harmony began to be cultivated, after the long tyranny of Rosas. The bye-laws specially provided for balls at stated periods, which soon became the most brilliant «reuniens» in South America. In 1859, Sr. Muñoz having concluded his

splendid house at the corner of Calles Peru and Victoria, the Club removed thither. The suite of saloons is unrivalled, and their luxury and style quite in keeping with the gay and fashionable society that has gained for the Progreso balls a Parisian reputation. The reading-room, library, billiard-room, conversation-hall, &c. are well arranged. The commercial news of the day is marked down on a slate. Besides the monthly balls, there are others on the grand fête-days of Buenos Ayres: strangers can procure an invitation through any of the members. The number of members is over 400; entrance fee, $3,000 m$; monthly subscription, $75.

The *Club del Plata* was founded, August 6th 1860, in the building formerly occupied by the Philharmonic Society, 112 Rivadavia. The saloons are spacious and handsome (President Derqui lodged here, on his visit to Buenos Ayres, in 1860). The style and character of this Club are similar to those of the Progreso, and the balls almost as brilliant. Foreign residents may become members, and visitors can easily procure an invitation. Entrance fee $600, and monthly subscription $60.

The *Club del Parque* has been recently opened in Calle Artes, and is a rendezvous for the neighbors of the West end.

The *British Library*, No. 5 Calle Defensa, was established about forty years ago, and contains 1,600 works of general literature, besides a reading-room furnished with the leading local and English journals: there is a chess and smoking-room. Mr. Duffy, the librarian, is very attentive to visitors. The rooms are open on all week days, from 9 A.M. to 10 P.M. There are printed catalogues, price $5; and a list is posted up each month of the new works received by the packet. Subscribers may take out a book for a stated number of days, passing which a small fine is exacted. Periodicals are likewise lent out. The subscription for the Lending-library and reading-room is $2 10 a year. Mr. Mudie supplies the institute with books.

German Clubs—There are no less than nine German clubs or societies. 1. The Germania, founded in 1853, composed of respectable tradesmen and their families, to the number of 250 members. They occasionally give concerts, balls, and amateur theatrical performances. They have a good reading room, with newspapers and books, also a piano, and the billiard room and skittle ground are open daily. 2. The Gymnastic Club, founded in 1854, comprises about 400 merchants and clerks, who have a large hall wherein gymnastic exercises are performed on certain days of the week: a small hall is being built for boys. The 14th anniversary was recently celebrated with a great athletic match and game of skittles, attended by a

number of ladies, the festivity concluding with a banquet. There are four fine skittle grounds, and a nice garden attached to the club. 3. The Teutonia, established in 1861, counts 100 members, mostly mercantile clerks, who give musical entertainments from time to time: their reading room contains books and papers in several languages; there are also music and billiard rooms and a refreshment and conversation hall. 4. The Concordia, opened in 1864, has 150 members, mostly tradesmen, who form a musical association and have a skittle ground, reading-room, &c. 5. The German Singing Academy, founded in 1864, counts 400 members who devote themselves entirely to the study of classical and sacred music. Concerts are given at regular intervals in the German church and the Coliseum, with the most brilliant success. 6. The Heimath, or «home,» was founded in 1865, and has about 100 members of the mercantile class: reading-room, billiards, and music-hall. The club has quite a musical character. 7. The Kranken-verein, founded in 1865, is a society for the relief of sick persons. 8. The German Hospital Society, is similar to the last, founded in 1867, for the purpose of establishing a German hospital: a concert was given at the Coliseum towards this end. 9. The Thalia, founded in 1867, counts already eighty members, mostly tradesmen, who recreate themselves at skittles daily, and have also a billiard room, a good supply of books and journals, and a music room: they sometimes give balls and concerts. It will be seen that most of the above clubs are of an eminently musical character, and the Germans also form a large proportion of the Philharmonic Society. In 1865 there was a grand gathering of all the German musical associations of Buenos Ayres, Rosario, Montevideo and Rio Grande in the first-named city, and the festivities were kept up for three days.

THEATRES.

Colon Theatre, called after Columbus, stands at the N.E. corner of Plaza Victoria; it is used as an opera house, and is the finest theatre in the Continent. It was built in 1856, by a joint-stock company, at a cost of £40,000; the roof is of iron, and was put up by Mr. Turner of Dublin. The architect was Mr. Charles Pelligrini. The house can conveniently hold 2,500 persons: there are three tiers of boxes, above which is the Cazuela, for ladies only; the upper gallery is called the Paraiso. In the pit there are only gentlemen; but a few rows of front stalls are set apart for ladies and gentlemen. Ladies in the boxes usually wear ball dress, but the etiquette in this particular is not rigid. There are tertulia seats on either

side of the President's state-box, for ladies and gentlemen; and screened boxes below for parties in mourning. The appearance of the house, when full, is extremely brilliant: the stage is of great size, the scenery very fine, and the orchestra good; the performances are fair enough, though not equal to what is seen in Europe. Performances commence in winter at 7.30 P.M., and in summer at 8.30 P.M. A first-rate coffee-house is attached to the theatre. Between the acts it is very customary to go around visiting friends in the boxes. Smoking is not allowed in the passages. The house is well lighted and ventilated, but the accommodation for entrance and exit is insufficient. Performances are given three times a week. Boxes, $200; tertulias, $30; pit, $20; cazuela, $15: besides these charges every one has to pay $20 entrance; there is no charge to the paraiso, other than that of entrance. The theatre is not exclusively devoted to the opera, but often used for the Spanish drama or other entertainments. Public dinners are sometimes given here, and the annual distribution of premiums to the State schools, on the 26th of May, is a grand function. During Carnival there is a series of masked balls, when the splendid suite of saloons is also thrown open, and as many as 1,000 tickets are sold in a night: the dancing is confined to the pit, which is crowded with the *demi monde*. From the roof is obtained the finest view in Buenos Ayres, taking in the city and suburbs *a vol d'oiseau*. At times even the coast of Banda Oriental is visible—the town of Colonia, and Cerro de San Juan—but this is an infallible sign of bad weather. There is a fire engine, with water-tank, on the roof.

Victoria Theatre, 341 Calle Victoria, is devoted to the Spanish drama; it holds 1,500 persons, but is badly constructed for sound. It is used once or twice a year by English amateurs, who give an English play, for benefit of the British Hospital. Boxes, $100—tertulias, $15—pit, $10—Cazuela, $10—and entrance $10. Performances, three times a week. The site of this theatre was quite outside the city only sixty years ago. When building the foundations the workmen came upon an old ditch, in which were discovered the bones and accoutrements of a number of English soldiers who fell in the unfortunate invasion of Whitelocke, A.D. 1807.

Franco Argentine Theatre, in Calle Cangallo, opposite the Hotel de la Paix, belongs to the French Bouffes, who give two or three performances weekly. It holds 1,000 persons. This was the oldest theatre in Buenos Ayres, till 1857, when it was almost destroyed in a riot; it was used as a Custom-house depot till 1864, when Madame Pauline converted it into a French theatre, taking a lease of it for nine years. The performances

consist of burlesques and comic operas. Upper boxes, $125—lower boxes, $100—tertulia seats, $15—pit, $10—entrance, $10.

The *Coliseum*. This elegant concert-hall was built by the English and German residents in 1865, in shares of £40 each, the architects being Messrs. Hunt and Schroeder. It stands in Calle Parque, between Calles Esmeralda and Suipacha, and cost about £12,000 sterling. Being simply a Concert-hall, it is small but beautifully arranged, with seats for 500 persons, and cloak-rooms, ladies' apartments, dining-hall, &c. suitable for balls, public dinners or such like purpose. The vestibule has three entrance-doors: the grand hall is lofty and well designed, with seven frescoes on the left and four on the right, the other three niches on the right being occupied by doors opening into a corridor. These frescoes, from the palette of M. Palliere, comprise the following allegories:—we begin on the left, 1. Figure of Victory, a woman crowned with palm. 2. A female Bacchante. 3. A girl playing on a guitar. 4. A priestess playing on the lyre. 5. Rustic poetry: a woman dancing and playing on the triangle. 6. Comedy: Folly with her cap and bells. 7. The Idylls: a woman playing on the ancient double-flute. On the right side, we have —1. Chant de Joie: a woman playing castanetts. 2. Chant de Deuil: female figure with urn and cypress-wreath. 3. Sacred Song: woman playing an organ, 4th. Concert Music: woman playing a violin. At the end of the hall, behind the orchestra, are three doors communicating with the salle-a-manger and ladies' apartments. The corridor on the right of the hall leads into a small court-yard with glass-roof, and other out-offices. The cloak-rooms are on either side of the vestibule at the entrance to the hall. The front of the building is very chaste, with the motto «Artibus et Musis.» The large hall measures forty feet by eighty-five, and is lighted by three gasoliers, with 110 jets, from the ceiling, which is forty feet high. The hall is admirably suited for singing, there being no gallery or other impediment to the sound. The dining-hall is 26x40 feet: behind the smoking room follow the servants' apartments and kitchen The Coliseum was inaugurated in November 1865, with a series of concerts by Professors Reinken, Werner and Schramm. The grand electric telegraph banquet was given here in November 1866, on the completion of the cable and wires to Montevideo. Balls and concerts are given at intervals, with great brilliancy and success. The select concerts of the German Singing Academy are considered very fine, but the number of invitations is limited. The Philharmonic Society, comprising the best Argentine and foreign amateurs, gives public concerts, which are always fashionably attended.

PLAZAS.

The *Plaza Victoria* is the great square of the city, covering an area of 21,000 square yards. In the centre is the column of Liberty, with the inscription «25 de Mayo, 1810,» to commemorate the revolution of Buenos Ayres, which resulted in the independence of all South America. Each side of the plaza has a row of paradise trees and marble seats: here the citizens sometimes sit, on summer evenings, while a band plays. The plaza is at times used for military reviews, the troops defiling in front of the Policia, and the President and staff occupying the municipal balcony. The Policia is under the direction of Don Enrique O'Gorman, who levies fines for the infraction of municipal regulations, and condemns minor offenders to sweep the streets or suffer confinement for some days. The Cabildo, erected in 1711, was the Town Hall, under the Spaniards, and is now the seat of the Law Courts: it was struck by lightning in 1862, but now has a conductor. On the ground-floor are the notaries' offices, and inside is the prison for malefactors. After 11 P.M. no one can pass under this arcade. The town clock, in the Cabildo tower, was put up by Messrs. Jaeggli & Diavet, agents for Roskell of Liverpool, in 1861. The former timepiece was very irregular, the weights being of sand, which changed under atmospheric influences: the present one is illuminated by night until 12 o'clock, and keeps excellent time; its cost was £500. The Recoba Nueva, or new arcade, is on the south side of the Plaza, and consists of a number of shops. There is a cab stand at the corner; the cabs are usually better than are found in most European cities. The north side of the Plaza is occupied by the Cathedral and the Archbishop's house. The portico and façade of the Cathedral are massive and yet elegant, the façade being decorated with an alto-relievo of «Joseph embracing his brethren,» to commemorate the family compact of Buenos Ayres with the Argentine Provinces after the civil wars of 1853—59. The episcopal palace was erected by order of the Legislature of the Province of Buenos Ayres, in 1861: it is spacious and well-built. Alongside is an old house, with tile roof: the owners refused a fabulous price for the site, whereon it was proposed to build a bank. At the corner of the Cathedral and Calle San Martin is a historic monument—the foundation-stone of Buenos Ayres, A.D. 1535: it is now covered with an iron plate, but remained in its original state, open to view, till 1862, when a water-cart broke off a large piece of it. It is nearly round, and quite rough and unpolished. Don Juan de Garay called this square the Plaza Mayor, which name it preserved till August, 1806, when it gained its present name, in honor of the complete

victory over General Beresford. The Recoba Vieja is a kind of Moorish arcade, with an ugly triumphal arch of brick and mortar, in the centre. Hair-cutters, shoemakers, confectioners, and small dealers have shops on either side of the arcade, the back looking into Plaza Mayo. The property belongs to Señor Anchorena. It is a great eye-sore, and should be knocked down as soon as possible. In front of the Recoba, municipal fireworks are let off on the civic festivals.

The *Plaza 25 de Mayo* is separated from the Plaza Victoria by the Recoba Vieja, and overlooks the river. It has the same area as the Plaza Victoria, and the chief object of interest is the Custom-house, which was built in 1855: it stands on the site of the old fort of Santa Trinidad, erected by the first Spanish settlers. Although possessing great historic interest the fort was demolished, and the present inferior building put up in its place. The old fort was the residence of the Spanish Viceroys, the headquarters of General Beresford in the English invasion of 1805, and the scene of the revolution of 1810. There was a tradition that the Spaniards had buried a great quantity of treasure here, but all efforts to discover the same have been unsuccessful. In 1863 Mr. Wilks disinterred a large iron chest near the spot, but the treasure, if any, had been previously taken away. The present Custom-house is elegant and commodious, but subject to inundation at high tides: that portion next the Plaza is used as the National Government-house, and was twice burned in 1867. In the upper story are the President's saloons, and here foreign ministers are received. At the entrance facing the Recoba arch, is a portico surmounted by the national flag. In the civil war of 1859 the building was occupied jointly by English, American, and French marines, with artillery. Near the corner of Calle Balcarce is the Congress-hall, a small amphitheatre, where the Chambers meet daily during the session, from May to November. The hall was built in 1863 by Sr. Larguia: it holds 800 persons, and the public galleries are accessible by a wretched winding-stair, while the ventilation of the hall is also insufficient. The members speak sitting down. The policeman at the door will admit no one with a walking-stick. The ante-chamber forms a large waiting-room, where mate is served to the Deputies: the other rooms are occupied by the secretaries and servants. On this site was the old barrack for National Guards. The north side of the Plaza is made up of the Colon theatre, the livery stables of Allinson and Malcolm, and two large buildings at the corners of Calle Mayo used for furnished lodgings and offices. Between the Custom-house and the Paseo Julio is the terminus of the Northern Railway tramway, and at this point it is proposed to build a grand station, where the four city railways shall

converge. In former times, political offenders and others were shot in this Plaza. Pillado states that this plaza was formerly one with that of Victoria, but at the beginning of the present century it went by the name of Plaza de Perdices (partridge square) because the vendors of game and poultry had their stands here. In 1822, when all the streets and plazas received new names, it was designated by its present title in honor of the revolution against Spain. In the first plan of the city this square is given to the Adelantado or Governor. A fort called after San Baltazar of Austria stood on the site now occupied by that part of the Government-house which faces the Recoba arch.

The *Plaza del Retiro*, sometimes called Plaza Marte, forms the N.E. point of the city, at the end of Calles Florida and Maypú, just over the gas works. It has an area of eight acres, say 42,000 square yards, and was first arranged as a public garden in 1860. In June, 1862, the equestrian statue of General San Martin was put up: it is cast in bronze, and was made in Paris, representing the hero of Argentine Independence crossing the Andes: he points to the streets Maypú and Chacabuco, called after his two great victories over the Spaniards. Critics find fault with the horse's tail, but the figure is altogether bold and graceful. The marble pedestal is fifteen feet high, and the statue fifteen feet more. There are seats in various parts of the garden, and the band on Sunday afternoons often draws a concourse of people. The barrack of the Retiro has accommodation for 1,000 men; it formed a part of Beresford's attack on the city in 1806: a dreadful explosion occurred in 1865, blowing up a great portion of the building, and killing seventy men. The steam saw-mill, or «carpinteria mecanica,» of M. Emile Landois, was the first of the kind in these countries, and inaugurated by Governor Valentin Alsina in May 1857. M. Landeis introduced the most improved machinery from France and the United States, and employs eighty operatives. At the other end of the Plaza is a fine house, built in English fashion, called Quinta de Laprida; it was for some years occupied by Dr. Scrivener, and is now an English school, under the direction of Dr. White. There is a good view of the city from this plaza. At the foot of the hill is the Retiro Station of the Northern Railway. The city records relate that the Retiro derives its name from having been under the early Spaniards, the retreat of a hermit, whose name, however, is not preserved. In 1702, when the English carried on a slave trade between Africa and the River Plate, a company of British merchants established here a depot for slaves, and built that part of the barrack which looks westward. Towards the close of the 18th century the other wing, now occupied by a park of light artillery, was erected; and in 1818 the

centre of the edifice. Between 1800 and 1818 the site was used as a Bull-ring, which was pulled down in the latter year, and the materials were used for the barrack. In 1808 the square was called Campo de Gloria, alluding to the success of the patriot forces which marched from this point against General Beresford and re-conquered the city, in 1806. Subsequently, in 1822, the name was changed to Plaza Marte.

The *Plaza Lorea* is ten blocks west of Plaza Victoria, between Calles Rivadavia and Victoria, and derives its name from Don Isidro Lorea, a neighbour of this locality, who was killed along with his wife in the defence of this point of the city against General Whitelocke's troops. Formerly it was the rendezvous of bullock-carts from the South. In 1860 an effort was made to sink an Artesian well; after a great outlay, it proved a failure. The Lorea market was established in 1861. The Plaza was originally known as Plaza de Piedad.

The *Plaza Monserrat*, at the junction of Calles Belgrano and Buen Orden, is a small square, about two acres in extent, deriving its name from the adjoining church of Our Lady of Monserrat. Behind the Plaza, in Calle Lima, is the temporary station of the tramway running to the Southern terminus in the Plaza Constitucion. In 1860 the Plaza was rented out to a Circus Company, but now it is neatly arranged, with trees and seats. The proper name of this square is Plaza General San Martin, but it is usually known by the name given it by the first settlers. In 1808 it was ordered to be designated as Plaza de Fidelidad in commemoration of the fidelity of the negroes, Indians, and cross-breeds who formed a volunteer battalion and drilled in this place to aid in repelling the English invasions of 1806 and 1807. In 1822 the name was changed to Plaza Buen Orden; and again in 1849 Rosas varied it by calling the Plaza after the hero of Argentine Independence, putting up at the same time on each corner the following inscription—«Campaign of the Andes, from December 12th, 1816, to February 12th, 1817.»

The *Plaza del Parque* is situated in the west-end of town, and derives its name from the Artillery magazine, where some rare old guns are still preserved. The plaza covers eight acres, and is nicely laid out, with a casino in the centre, and merry-go-rounds for children. A band plays every Sunday afternoon, but the company is not so fashionable as at the Retiro. The Western Railway bisects the plaza diagonally, and there are some fine houses in the neighborhood. In 1861 it was made a public garden, with paradise trees, seats, and railings. On the north side is the magnificent residence of Señor Miró, surrounded by neat gardens. The Western Railway terminus is on the east side—and here was started the first railway in the River

Plate. This line belongs to the Provincial Government, and runs as far as Chivilcoy, 101 miles westward. It is being prolonged to Bragado.

The *Plaza Libertad* is a small square of four acres, close to the Parque; in 1862 it was laid out and planted, previous to which time the bullock-carts used to encamp here. As yet, there are few fine houses, although the situation is high and favorable. This square, previous to 1822, was known as Hueco de Doña Engracia, that being the name of the lady who benevolently ceded it to the city for a public square. Adjacent to this square, in Calle Libertad, is the French Hospital, under charge of the «Sœurs de Charité».

The *Plaza Independencia*, at the junction of Calles Independencia and Buen Orden, is in the south end, covering an area of 3 acres, and recently laid out as a public garden. It was formerly called Plaza de Concepcion, from the adjoining church of that name, the roof of which fell in (1860) while in course of construction: the edifice is now nearly finished. Beside the church is a «corralon» sometimes used for a barrack. In the siege of 1859 the Plaza was made an artillery depot. Hard-by is the institute of Los Ejercicios, a house of detention for women who may have been guilty of minor offences. The Plaza is called after the Independence of the Argentine Republic, proclaimed at Tucuman, July 9th, 1816.

The *Plaza Constitucion*, at the extreme south point of the city, is a large, open space, covering about twenty acres. All the bullock-carts from the South, with wool and hides, encamp here, to the number of several hundreds, although they are going very much out of fashion since the opening of the Southern Railway. Large deposit stores or «barracas» are in the neighbourhood. The tramway runs through the Plaza, and the Southern terminus is a handsome and commodious structure: the Southern Railway runs out seventy-two miles, to Chascomus. A little beyond the Plaza are the Mataderos where cattle are killed for the city markets. The brokers have a club and reading-room in the Plaza, where they meet to transact business. The busy wool-season is from November to March.

The *Plaza Once de Setiembre*, at the extreme west of the city, has an area of twelve acres; it is the great produce market for the western and northern districts. During the wool season this place is crowded with Irish sheep-farmers: Mr. Duggan does the chief business with his countrymen, and has large deposit stores in the Plaza. The Once de Setiembre (11th of September) is so called in commemoration of a revolution on that day (1852) which expelled General Urquiza from Buenos Ayres; an insignificant statue once decorated the Plaza, but it has been removed to the Parque casino. The new workshops of the Western Railway are worthy

of note, and behind them is Mr. Ryan's «lavadero» for washing sheep-skins. There are some large mills, and Demarchi's ice-factory, in the neighbourhood. The Plaza is twenty-three «cuadras», nearly two miles, west of Plaza Victoria, and an omnibus plies every quarter-hour, fare $5. It is also the first station on the Western Railway, being one and a-half miles from the Parque terminus.

MARKETS.

There are five city markets for the supply of meat, vegetables, poultry, fruit, fish, flowers, singing-birds, butter, cheese, eggs, &c. Beef and mutton are brought in carts from the mataderos; vegetables and fruit are mostly supplied by the Italian «quinteros» of the suburbs; the river always gives an abundance of dorado, pejerey, bagre, and other excellent kinds of fish; the railway trains bring in a profusion of partridge, duck, and domestic poultry; and the «chacreros» of Moron, Quilmes, &c., raise most of the butter and eggs. Moreover, fruit is often brought from Montevideo or Brazil, and sometimes cheese and butter from the Swiss colonies of Entre Rios or Santa Fé. The best potatoes come from Baradero, the Carapachay islands and Chivilcoy; the best peaches from Point Santiago, Ensenada; the best meat is that killed in the camp, and brought in by rail; and the best butter is that from English-bred cows. The city is supplied with milk by a number of Basque «lecheros,» who come in on horseback every morning from Quilmes, Lomas de Zamora, and Moron. The pork raised in the country is to be avoided, the pigs being usually fed in the saladeros. Game is always abundant and cheap; poultry is very dear. The best hour for marketing is five o'clock A.M. It is necessary to beware of buying «tired» beef, which looks sound, but is apt to cause diarrhœa. The usual market prices are as follows:—Beef, $1 per ℔; fish, $3; potatoes, $1; vegetables, $2; partridges, $10 per pair; ducks, $10; chickens, $25; turkeys, $40 each; butter, $15 per ℔; eggs, $10 per doz.; mutton, $10 per quarter; peaches, $1 per doz.

The *Old Market* is at the corner of Calles Potosi and Peru, and is as old as the city itself. It was formerly very unclean and inconvenient, till Messrs. Urien rebuilt it in its present form, in 1864: it is still much too small, not quite two acres, and is surrounded on all sides with houses, preventing proper ventilation. Until 1859 it was the only market in the city. The fees for market stalls form a part of the municipal revenue, and no one can open a shop for meat or vegetables within a certain distance (half-a-mile or so) of any of the markets. The chief entrances to the Old

Market are at the corners of Calles Potosi, Chacabuco, and Moreno. In 1865 some excavations were made opposite to the University, when a quantity of long hair was found in an old well: the site had been, at the beginning of this century, occupied by a barrack for the Blandengues or militia frontier regiment, who, on being ordered to cut their hair short, mutinied and were only quelled after much bloodshed. The Old Market is in the most central and populous part of the town.

The *Mercado del Plata*, at the junction of Calles Artes and Cuyo, was built in 1839 and called «The New Market,» occupying an area of less than two acres. It was formerly called Plaza de Union, because here the patriots assembled to expel Whitelocke. In 1822 the name was changed to Plaza Artes. It was partly burnt down in 1863. The stall-keepers are mostly Italians, and the market is always well supplied. It is the only market in the N.E. corner of the town.

The *Mercado del Comercio* was erected in 1862 and inaugurated by General Mitre: it occupies a small square (¾ of an acre) that was formerly called Plaza de Comercio, and previous to 1822 known as Plaza de Residencia. This market answers for the extreme south end of the city, being ten cuadras S. of Plaza Victoria.

The *Mercado de Lorea* was opened by Governor Saavedra in 1864, adjacent to the Plaza Lorea, and covering about one acre. It is fitted up with great taste, but does not belong to the Municipality, the owners being several private parties who purchased the right to open the market on their own account, for the benefit of the large population in the west end of the town: it is situate eight cuadras west of the Old Market.

The *Mercado de Independencia*, at the corner of Calles Independencia and Lima, is less than an acre in extent, and not so well supplied as the other markets. It was opened in 1866, for the S.W. quarter of the city.

The *Mercado del Norte* was opened by Don Eduardo Madero in 1867, in a site formerly used as a nursery, at the junction of Calles Florida and Cordoba. It covered an area of two acres, and was intended to supply the north end of the town, being fitted up in excellent style. It has not, however, proved successful, and is now used as a Customs deposit, called the Aduana Chica, where all cargoes by steamers from abroad are deposited: it is the great bonded warehouse of foreign importers.

CHAP. III.

PUBLIC DEPARTMENTS.

GOVERNMENT-HOUSE, POST-OFFICE, POLICIA.

THE *National Government-House*, in Plaza 25 de Mayo, is an unsightly and irregular edifice: it was twice partially burnt in 1867, when many valuable documents were lost. The President's saloons, upstairs, are fine and airy, with a good view of the port: here the Foreign Ministers are received when presenting their credentials. The various Departments of the Interior, Foreign Affairs, Finance, Instruction, and War, have their offices in the same building: office hours from 11 A.M. to 4 P.M. The offices of the Tesoreria and Contaduria are on the ground floor.

The *Stamp Office* is in the new Custom-house, open from 9 A.M. to 4 P.M., for the sale of National stamped paper. Thirty days are allowed by law for stamping notes or documents of any kind. After that period any unstamped paper brought before any court must pay a fine ten times the amount of the proper stamp. Old stamps, not used, may be exchanged.

The *Provincial Stamp Office* is in the Government-house, Calle Moreno, and here all documents, except for the Custom-house or Federal Courts, must be stamped.

The *Post-Office*, 115 Calle Bolivar, is lodged in very small and inconvenient premises. Mr. Posadas has greatly reformed this branch of the public service, but there is still great room for improvement, if the revenue would admit. The principal hall for despatch of business is well arranged and has a bust of Rivadavia. Mr. Hansen and others of the officials speak

English. Office hours in summer, from 8 A.M. to 4 P.M., and in the evening from 5 P.M. to 7 P.M.: in winter from 8 A.M. to 4 P.M. On Sundays and holidays, from 9 A.M. to noon; but when the mails from Europe arrive the office is kept open indefinitely. Over 4,000,000 papers and letters pass through the office in the year. There are branch-offices at the Captain of the Port's and the various railway stations. Letters are delivered through town twice a day. The mails are despatched every day to the principal towns in the province of Buenos Ayres, viz.—1. By the Western Railway to Flores, San Martin, Moron, Merlo, Moreno, Matanzas, Lujan, Mercedes, Chivilcoy, Las Heras, and Chacabuco: there are diligences plying from these various stations, which take mails to the following towns: Pilar, Capilla del Señor, San Antonio, Arrecifes, Lobos, Saladillo, 25 de Mayo, Giles, Fortin de Areco, Salto, Rojas, Pergamino, Junin, Navarro, Bragado, and Nueve de Julio. 2. By the Northern Railway to Belgrano, San Isidro, San Fernando, Tigre, and Conchas: the steamboats from the Tigre take mails three times a week to Zarate, Baradero, San Pedro, San Nicolas, Rosario, Santa Fé, Paraná, and Gualeguay. 3. By the Southern Railway to Barracas, Lomas de Zamorra, San Vicente, Chascomus, and intermediate stations, from which the diligences radiate to Ranchos, Cañuelas, Monte, Las Flores, Tapalquen, Dolores, Pila, Vecino, Monsalvo, Ajó, Tordillo, Mar-Chiquita, Loberia, Tandil, Juarez, and Azul. 4. By the Boca railway, to the Boca and Barracas. 5. The diligence goes twice a week to Quilmes, Ensenada, and Magdalena. 6. To Bahia Blanca and Patagones by steamer once a month. 7. To Cordoba, Tucuman, Salta and the northern provinces three times a week, via Rosario. 8. To San Luis, Mendoza, and San Juan, once a week, via Rosario. 9. To Chile, Peru, and the other Spanish republics, once a week, via Rosario and Mendoza. 10. To Corrientes and Paraguay by steamer twice a week. 11. To Santa Fé twice a week. 12. To Salto, Paysandú, Concepcion and other ports of the Uruguay twice a week. 13. To Montevideo every evening. 14. To Europe by the French packet and the English packets every month, as also by the Liverpool, London, and Marseilles lines of steamers. 15. To Brazil via Montevideo by the Brazilian, English, and French mail-steamers, eight times a month. All letters must be prepaid, except those directed to the President, Governors, or Ministers of State, and any letters found unstamped, in the Buzon, will be detained and published, as well as those without a direction. Letters may be certified or registered, for greater security. The post-office will take no letters outside the mail-bags: ship-captains or passengers having letters must deliver them on arrival to the Captain of the Port. Army-letters are carried free. Letters uncalled for are

published every three months, and burned at the end of the year in presence of the proper authorities, after first taking out any documents that may be of value. It is prohibited to send money or articles of value, through the post, even in registered letters: such articles must be forwarded through steamboats or other agencies; samples of goods through the Custom-house. Special couriers for private parties pay ten cents per league, besides the usual postage. The law of 1863 fixes the posting charges in the upper provinces at one real (6*d*.) per league for each horse. The post-house keepers must always provide travellers with horses, and give them hospitality at conventional terms. Parties carrying unstamped letters are fined $50 or imprisoned for six months. Robbing the mail is punishable with four years penal service. The tariff for all letters is five cents (or $1¼ Buenos Ayres currency) for letters not exceeding ½ oz.; ten cents for ½ oz., and so on. Registering a letter costs twenty-five cents extra. Books, pictures, music, &c. pay five cents per ℔. Newspapers for all parts go free. This does not include the charges made in foreign countries, viz., England or France, for letters or papers carried by the mail-steamers. Street delivery in town is charged five cents extra. Boxes are set apart in the Correo for the chief mercantile houses, to the number of 800, at a charge of $200 m|c. per annum. The stamps newly made by the New York bank-note company are very neat, and as follows—Rivadavia's head, pink, five cents; General Belgrano's, green, ten cents; General San Martin's, blue, fifteen cents. The Postmaster-General, Señor Posadas, has authority over all the postmasters in the fourteen Argentine Provinces; they are 160 in number. On the right of the «patio» are hung around the wall alphabetical lists of letters not yet called for, with the proper number attached. Strangers must either produce a document of their identity, or seek assistance at the *Standard* office, close by, at 74 Calle Belgrano. The house at present occupied by the Correo was built by Don Martin Rodriguez de Vega, who bequeathed it for benefit of the Ejercicios asylum. It is proposed now to purchase the Bolsa and convert it into a post-office. The first Correo established in Buenos Ayres was by Don Domingo Basabilvaso, in 1748.

The *Police Department* is in Plaza Victoria; the Chief of Police has two secretaries, a treasurer, 28 clerks, two physicians, a jailer, a watchmaker, 21 commissaries, 17 sergeants, 120 vigilantes, and 240 serenos. The city is divided into 14 Sections, each of which is under the care of a commissary, who arrests offenders, and levies fines for breach of municipal regulations. When he arrests anyone he must send in a report of same within twenty-four hours: he cannot enter a house without a written order, or in cases of

flagranti delicto. The policemen wear swords, and always go on horseback: they do not go on beats as in Europe, but can only be found at the Comisaria of the section. Minor offences are punishable by fine, or detention for an equivalent number of hours. The Correctional Judge tries ordinary police cases, but there is appeal to the superior tribunals. In cases of any serious crime the offender is removed from the prison of the Policia to that of the Cabildo. The serenos, or night-watchmen, are natives of Galicia: they sing the hours from 11 P.M. to 5 A.M., and carry a pistol, a cutlass, and a lantern. Serenos were first got up by voluntary subscription in 1834, and shortly afterwards established by law: there are 60 mounted and 180 on foot, under the direction of an Adjutant-major and seven Adjutants. The annual cost of the serenos is about $1,300,000. The police service is miserably defective, but happily the inhabitants are in general orderly and well-conducted. It is intended by Government to send to England or the United States for police-officers, so as to organize a proper force for the city. There is a fire-engine attached to the Policia, but it has never proved of any use.

PROVINCIAL DEPARTMENTS, LIBRARY, LEGISLATURE.

The *Provincial Government-house* was built by Rosas, and occupies half a «cuadra» between Calles Bolivar, Moreno, and Peru. The entrance is in Calle Moreno, and around a spacious court-yard are the various public offices. The Governor of Buenos Ayres has his apartments on the right; an aide-de-camp receives visitors in the ante-chamber. The Minister of Government, the Inspector of Arms, and other officials, have offices on the left. The Finance Department is in the second «patio.» Parties wishing to inspect the Contribucion Directa books for the city or province can do so free of charge: they form a complete register of the various properties, their owners, and valuation. The tax for «patentes,» or licenses, for the various trades and professions, is payable at an office in this building, with separate entrance in Calle Moreno.

The *State Library* is in Calle Moreno, opposite the Government-house, occupying seven saloons in the upper story. There are 18,740 volumes, and 101 manuscripts, most of which belonged to the Jesuits, and are valuable for their antiquity; there is also a number of foreign works in all languages, some on general science, others on South America. The chief librarian is Don José Marmol, the poet. It is a pity that there is no catalogue. The assistant librarians will procure any book that is required, and also supply pen and ink to take notes, if necessary. The library is

open to the public, free, on all week days, from 10 A.M. to 2 P.M. No smoking or conversation allowed. The average attendance of visitors does not exceed a dozen daily. The library was established by Moreno in 1810, but suffered afterwards to fall into decay. In 1822 there were 20,000 volumes, and in 1854 only 15,000. Since the latter date it has been much increased, and the publishers of all new works in the country have to present a copy. There is a complete collection of all newspapers published here and in Montevideo.

The *Chambers of the Legislature of Buenos Ayres* have their principal entrance in Calle Peru, with a side entrance for the public in Calle Moreno, next the State Library. The Chamber is small but elegant, in the shape of an amphitheatre, dimly lighted from the roof. The President and Secretaries of the Chamber sit on a raised bench, under which are the reporters. The galleries for the public give accommodation to 400 persons. The Senators and Deputies meet here alternately, and the Provincial Ministers attend when summoned. The ante-chambers are small and old-fashioned: here the members take máte. There is a suite of rooms occupied by clerks and officials. The Legislature is composed of twenty-four Senators and fifty Deputies, elected by the various partidos or electoral districts of the Province of Buenos Ayres. The Hall of Session was built in 1822, by Don Prospero Catelin, and repaired in 1864. It occupies the court-yard of the old Jesuit building, standing on the exact spot formerly occupied by the dungeon in which the followers of the famous cacique Tupac Amaru were confined after their attempted revolution in 1780.

TOPOGRAPHIC OFFICE, ARCHIVES, COMMISSARIAT.

The *Topographic Department* is in the premises formerly devoted to the Tribunal of Commerce, to which access is gained by a steep staircase from Calle Peru. This office was founded by Rivadavia in 1824, and is managed by Don Saturnino Salas and an efficient staff of civil engineers, comprising Messrs. German Kuhr, Pedro Benoit, Antonio Malaver, and Ignacio Casagemas. This department published in 1866 an admirable map—six feet by four and a-half—of the Province of Buenos Ayres, showing minutely every estancia and all the natural features of the various partidos. It also published in 1867 a similar map of the city and suburbs. The business of the office is to keep a correct register of the sub-divisions of property, to examine and approve all surveys of land, to give licenses for building houses in town, and to make whatever charts, maps, or plans may be required by the authorities. It also serves as an academy for surveyors,

who have to undergo a severe examination in the theory and practice of surveying before being allowed to practise their profession. The chief of the department has a salary of $6,000 a month.

The *Department of Schools* adjoins the last-mentioned, and is under the charge of Don Manuel J. Peña. Here are deposited the supplies of books and furniture for the State schools. After the fall of Rosas, in 1852, Dr. Vicente Fidel Lopez was named Minister of Instruction, and undertook to re-model the system of education: in October of same year the Department of Schools was established. Don Santiago Estrada is the present Inspector of Schools.

The *State Archives* are in the same building, under the direction of Don Manuel R. Trelles, assisted by seven clerks: here are kept the valuable records of Buenos Ayres since the Conquest, which throw such light on the history of the Vice-royalty of La Plata and the neighboring countries of Spanish America. Important documents and title-deeds, which belong to Paraguay, Tucuman, the Cuyo provinces, and the Banda Oriental, still remain in this department. Sr. Trelles also publishes a half-yearly volume of statistics referring to the Province of Buenos Ayres: the information at his disposal is so defective, that his efforts are the more creditable. The contents of the archives are—7,500 bundles of documents, 6,167 account-books, 8,700 printed books and pamphlets, and a number of periodicals. Since 1857 Señor Trelles has published twenty volumes of ancient records and statistical reports.

The *National Statistical Department*, situate at 64 Calle Belgrano, is under the direction of Mr. Damian Hudson; this gentleman, who is eminently qualified for the post, is a native of San Juan, and son to an American settler. He compiles the various official returns from the fourteen provinces, which are scattered and imperfect. A national census has been ordered, and will probably be carried out on the wind-up of the Paraguayan war. The Customs' Department publishes its own statistics half-yearly.

Commissariat-General.—This department was formerly situate in Calle Bolivar, adjoining the Provincial Government-house; it is now located in the National Government-house, Plaza Mayo. The Commissary-General, Don José Luis Amadeo, has to contract for and examine all supplies of provisions, clothing, &c., for the army and navy, as well as for the friendly Indian tribes of Calfucurá, Coliqueo, and others on the frontier. Tenders for such supplies must be lodged at this office, which also gives the order for payment when the goods have been duly examined and approved.

PARQUE, CONGRESS HALL, CAPITANIA.

The *Parque*, or Artillery Magazine, situate in the Plaza Parque, covers an entire «cuadra.» It was founded by the famous patriot Moreno, who served as Minister of War in the epoch of Independence. The collection of guns is more remarkable for antiquity than usefulness, most of them being old bronze pieces of the Spaniards, with quaint inscriptions—«Ultima ratio regum,» «El Rey Carlos me hizo,» &c. Visitors are admitted gratis, and the stranger will be amused to see that smoking is not prohibited: the magazine, however, is said to contain no powder. Cannon balls are piled up in the yard, and the old guns are exposed to the inclemency of the weather: some interesting old cannons are still seen at some of the street corners through town. The powder depots are outside the city, near Palermo. The Parque has seven large store-rooms, in one of which was recently kept one of Krupp's steel guns; there are also five workshops, a hall of arms, and a number of apartments for use of the officials and operatives.

The *Congress-hall*, in Plaza Mayo, was erected by President Mitre's Government for the first united Argentine parliament on the removal of the metropolis to Buenos Ayres, and inaugurated in May 1864. The front is small and unpretending: the chief entrance, surmounted by the National arms, consists of three iron gates, opening into a marble portico, and only the members of Congress, public dignitaries, or Foreign Ministers are admitted by this access. The right wing of the building is devoted to the use of the Public Credit Department, and on the left is the entrance for the public to the galleries of the Hall. Congress is composed of Vice-President Alsina, 28 Senators, and 49 Deputies, there being two Senators for each province, and Deputies in the following ratio—Buenos Ayres 12, Cordoba 6, Corrientes 4, Santiago 4, Tucuman 3, Catamarca 3, Salta 3, San Juan 2, Mendoza 2, San Luis 2, Jujuy 2, Rioja 2, Entre Rios 2, Santa Fé 2. The sessions open in the first week of May and close in October, but there is usually an extraordinary session till November to conclude the current business of the year. The Deputies receive a salary of $4,000 s. per annum: some of them reside altogether in Buenos Ayres.

The *National Credit Office* was organized on 16th November, 1863, and commenced its labors on January 2nd, 1864, the board being composed of Messrs. Lucas Gonzalez, Alejo Arocena, Manuel Zavaleta, José Maria Cantilo, and Martin Estrada, with the following employees: Don Juan Dominguez, secretary; Don Alfonso de Maria, treasurer; Don Ramon Rezabal, book-keeper; Don Cipriano Quesada, assistant clerk. The accounts immediately

submitted to their care were the following—1. The Public funds of October 1st, 1860, for $3,000,000. 2. The provisional bonds of October 20th, 1863, for the Paraná bonds and Treasury notes up to 1st April, 1861. 3. The credits admitted by Government as lawfully proceeding from the Paraná floating debt, subsequent to April 1861. 4. The compensation awarded by law of November 1863 for «auxilios» given to Lavalle's army against Rosas. 5. Six per cents awarded by Congress for claims of indemnity. 6. The bonds and coupons given in payment of foreign claims for injuries sustained in the civil wars. 7. The petitions of the widows and relatives of Generals Lavalle, La Madrid, and Paz. The treasurer was to have charge of all funds for payment of coupons and amortization, but not to pay anything without written order from the chairman of the board. All coupons to be paid faithfully within the eight days fixed by law. The bonds were issued in five series, as follows: Serie A, $100—Serie B, $600—Serie C, $1,000—Serie D, 2,600—Serie E, $5,000, each having forty coupons annexed, one payable every quarter, and then burned. Whenever a coupon became payable it was necessary to present the whole Bond and have it compared with the corresponding block, which was cut zig-zag. Nevertheless a great forgery was discovered in October, 1868, immediately after President Sarmiento entered office, whereby it appeared that duplicate bonds, signed by the proper authorities, had been regularly admitted and the coupons paid for some years back. It was concluded that in the signing of so many thousand coupons several duplicates were introduced surreptitiously, and the parties suspected of the fraud were no longer in the country, nor was there any proof sufficiently inculpating anyone in particular. The Paraguayan war caused new loans and frequent emissions of Public Funds, all which are specified in the budget for 1869: see section A, page 191.

The *Provincial Credit Office*, 91 Calle Moreno, was established in 1821. The board consists of six persons named by Government, and an accountant who has a salary of $1,000 a month. The accounts under their charge are as follows:—1. Original issue of six per cent. 28,000,000, and of four per cents. 2,000,000. 2. Issue of 10,000,000 six per cents in September 1856. 3. Issue of 12,000,000 six per cents in July 1858. All these sums are in the paper currency of Buenos Ayres, and the annual interest amounts to $3,821,592m/c, or about £30,500 sterling, besides an amortization or sinking-fund of $630,000m/c per annum, equivalent to one per cent. Until assumed by the National Treasury in 1864 there were two other debts at the charge of the Province, viz.: that of May 1850, for 20,000,000; and of June 1861 for 21,000,000; the annual interest of both amounting

to $2,640,000m/c, and the sinking-fund to $920,000. The English loan of 1826, to Buenos Ayres, was also a provincial debt until assumed by the nation in 1864.

The *Capitania*, or Captain of the Port's office, is situate in Calle Mayo, opposite the English Church, with another entrance by Paseo Julio. The offices are open from 10 A.M. to 4 P.M. All foreign vessels arriving from beyond the seas have to send their Bill of Health before being allowed to communicate with the shore: the captains have also to declare on arrival what cargo they bring, to whom consigned, date of departure from home and arrival here; if they bring passengers a list of same must be entered in the Capitania books, and any letters are handed over to the branch Post-office in this building. If the vessel be Argentine, or belonging to a flag that has no Consul here, all her papers must be lodged at the Capitania. The captains have also to report exactly on the condition of their vessels. Signal flags are used to communicate with the pontoon Castelli in the outer roads. The Capitania has a dungeon for refractory sailors: a guard is always mounted on the Paseo Julio entrance. Colonel Bustillos has a staff of twelve officials and thirty-six sailors, with three state barges: he has recently received jurisdiction over all the Capitanias of the Republic. The branch Post-office receives letters for Montevideo, &c., up to half an hour before sailing of steamer. For any matters before or after hours, apply at the Ayudantia, next the guard-house at the Paseo Julio. No one is allowed to gallop by the Capitania.

MUNICIPALITY, LAW COURTS.

The *Municipality*, or Corporation, holds its meetings in a saloon over the Policia: its charter dates from October 1854, and it is composed of a President, thirteen members, and twenty-four «suplentes:» each parish furnishes a member, and the «suplentes» are elected to take his place in case of sickness or absence. The Minister of Interior is an ex-officio president, but never attends, the Provincial Government each year naming the Vice-President from among the members. There are two secretaries, eighteen clerks, and three servants. The revenue exceeds $12,000,000 per annum, and is spent in this manner: hospital and lunatic asylum, $2,000,000; serenos, &c., $2,000,000; schools, $1,000,000; scavenger carts, $1,000,000; clerks and fireworks, $1,000,000; paving, &c., $5,000,000. The items of income are—public lottery, $4,000,000; serene tax, $2,000,000; market stalls, $1,000,000; mataderos, $1,000,000;

licenses, &c., $4,000,000. Foreigners are sometimes elected to serve on the Board, but they generally resign. The street lighting is done by the Gas Company; there are 1,722 lamps, for which the company levies payment at each house. In the suburbs there are 1,483 oil lamps, belonging to the Municipality. The neglected state of the city is unsusceptible of exaggeration, and each succeeding Board throws all the blame on the preceding one. The Corporation of 1868 was expelled by an indignation meeting of the citizens, who formed a Committee of Public Health in its room; but the Board was reinstated by Government shortly afterwards. A better election of members is hoped for the year 1869.

The *Archbishop's Palace* is a handsome two story edifice, next the Cathedral: the reception hall, in the upper story, is a magnificent apartment, with a bust of Pope Pius IX. and some pictures. The building was completed in April 1862, since when the Archbishop resides here, along with his secretary, chaplain, and three other clergymen.

Courts of Law.—There are the ordinary Courts of Primera Instancia in the Cabildo, where civil and criminal causes are tried: attached to these Courts are the offices of the escribanos or notaries, for all judicial proceedings, transfer of property, &c.: most of the escribanias date back many years, and have records from the seventeenth and eighteenth centuries, being used as registry offices in all matters of assignment, mortgage, &c. The Tribunal of Commerce is next to the Topographic Department, in Calle Peru; its proceedings are guided by the «Codigo de Comercio» framed for Buenos Ayres. The Superior Tribunal of Justice is composed of ten judges, and sits in the Cabildo, to hear appeals from the ordinary civil, criminal, and commercial Courts: it has immediate jurisdiction over the Justices of Peace in the camp, and has a Fiscal or Attorney-General, two reporters, a notary, and other employees. Each of the Judges has a salary of $6,000 a month. Every Saturday they visit the prisons, to see the prisoners and how their cases stand; but the proceedings of this and the other Courts are so tedious that a reform is much called for. The «Code of the Indies,» and other obsolete Spanish statutes, were hitherto the sole system of procedure; but some new codes have been compiled and will shortly be adopted. In the camp there are three tribunals; one at San Nicolas, north; one at Mercedes, west; and one at Dolores, south: these are often badly attended to, as there are few lawyers in town willing to take such responsibility for a poor remuneration. The High Court of Justice is one of the supreme powers of the State, viz.: the Executive, Legislative, and Judicial, and the Government cannot interfere in its affairs, which secures to the tribunal perfect liberty of action. The public never attend the hearing of lawsuits, and

formerly the proceedings were altogether secret: by decree of November 12, 1868, President Sarmiento has ordered the Fiscal to publish all suits in one of the daily papers. There is no trial by jury, unless in cases of press prosecution for sedition or libel. Witnesses usually give their depositions in writing, instead of orally, The President of the High Court has jurisdiction in cases of Protestants seeking a marriage license. The Supreme Federal Court adjoins the Provincial Government-house, in Calle Bolivar: it was established in 1863, and consists of five Judges. All matters in which foreigners are concerned, either against the Government or private parties, or questions between any of the Federal provinces, are finally decided by this Court, to which, also, there is appeal from all other tribunals.

Academy of Jurisprudence, foubded January 16th 1815, by Manuel A. Castro. The institute is under the direction of the High Court of Justice, and meets twice a week at the University, where lectures and imaginary lawsuits take place. The students must have already taken their degree as Doctor of Laws, and cannot practise at their profession till after two years attendance at the Academy. The session is from March to November. The average number of students is thirty-five. There are 120 advocates in Buenos Ayres.

BOARD OF HEALTH, LOTTERY, CITY PRISONS.

Faculty of Medicine, founded in 1852, by Drs. Fernandez, Montesdeoca, Alvarez, Albarellos, Garcia, Muñiz, Cuenca, Gomez, and Ortiz Velez. The board at present consists of eight professors, eight substitutes, and a secretary, and resides at 53 Calle Corrientes: the studies comprise—clinical surgery, operations, midwifery, diseases of women and children, materia medica, therapeutics, pharmacology, hygiene, nosography, pathology, anatomy, medical jurisprudence, physiology, &c. The term of studies is for six years, the only degree given being that of M.D. Foreign practitioners, although having diplomas from European universities, are not allowed to practise without previous examination cf the Faculty of Medicine, and in this their chief difficulty will be the Spanish language. The academical year begins on 1st March; the examinations commence on December 1st, after which there is vacation. The school of medicine is opposite San Telmo church, and was built in 1858 out of the proceeds of fines levied from foreign physicians, apothecaries, midwives, and bleeders. There are two large lecture rooms, a library, a school of pharmacy and natural history, and a small museum; besides the grand hall for the conferring of degrees.

Vaccination and Board of Health, situate next the Provincial Chambers in Calle Peru. The first vaccinator in Buenos Ayres was the Rev. Saturnino Segurola, and in 1821 Rivadavia established the department, subject to certain municipal regulations. The annual number of vaccinations in town at the «vacuna» offices is about 2,000. Besides the head office in Calle Perú, there are branches in Calles Defensa, Santa Fé, and Santiago del Estero; office hours 12 to 2 in winter, 5 to 7 in summer. The Board of Health was created in 1852, and is supposed to watch over the public health, inspect markets and private houses, &c.: this is merely imaginary, and the Board has no real existence.

Emigrants' Home, situate No. 8 Calle Corrientes, under the direction of Mr. Van Bartels, provides board and lodging gratis for distressed immigrants, until they find employment. It is supported partly by the National Government and partly by subscription, but not more than 5 per cent. of immigrants seek its refuge. The expense of the institution amounts to about £1,000 per annum. The first immigration committee was established in this city in 1824.

Lottery of the «Beneficencia,» situate at 168 Calle Bolivar, was established in its present form in 1852, but the institution existed many years before as a source of public revenue. It produces at present about $5,000,000 m/c per annum, in weekly and monthly lotteries: the weekly has a prize of $120,000, the monthly $300,000, the prizes being publicly drawn and then published. Of the total receipts 75 per cent. is given in prizes, 10 per cent. goes in expenses, and the rest (15 per cent.) is devoted to the charitable institutions under care of the Municipality.

Public Lands Office, in the Government-house, Calle Moreno, established in 1850, open daily from 10 A.M. to 4 P.M. Information may be obtained for soliciting land «in enfiteusis,» renting Government lands, or buying same.

City Prisons.—There are three: that under the Cabildo is the principal, and is guarded by a company of soldiers expressly raised by the Provincial Government; formerly the National Guards of the city had to perform this irksome service. The prisoners are allowed to see their friends on Sundays and Thursdays. The Debtors' prison is in Calle Moreno, behind San Francisco church: persons guilty of misdemeanors are also confined here; visiting days as above. There is another prison called the Penitenciaria near San Telmo; but a proper jail is much needed, the escape of prisoners being at present a frequent occurrence.

MUSEUM AND UNIVERSITY.

The *Museum of Buenos Ayres* is, perhaps, the richest in the world in antediluvian fossil remains, and in late years it has been carefully managed by the distinguished German *savant*, Professor Burmeister. It is situate in Calle Peru, corner of Calle Potosi, opposite the Old Market. Rivadavia was the founder of the Museum (December 31, 1823), and it first occupied the upper story of Santo Domingo monastery. During the rule of Rosas it was much neglected, the only valuable collection being 736 mineral specimens brought from France. In 1854 the Society of Natural History of the Plate was formed, and donations quickly poured in from all quarters. M. Bravard (afterwards lost in the earthquake of Mendoza) lent good assistance; and in February 1862, President Mitre, through the Prussian Minister, Baron von Gulich, induced Dr. Burmeister to give up the museum of Halle and come out to take charge of that of our city. Under the present director it has undergone complete reform, and a saloon forty yards long, with three other apartments, is appropriated for the institution. In classifying the objects of exhibition, Dr. Burmeister divides them under three heads: artistic, historical and scientific. There is no work of art of any merit, but only some drawings or copies of pictures executed by students sent to Florence and Rome at the expense of the National Government; also a few portraits of distinguished individuals, which serve for curiosities. In the historic section are—three Egyptian mummies supposed to be about 4,000 years old, some Peruvian vases prior to the Spanish conquest, with gold and silver idols and some mummies: these Indian sepulchres are also found in San Juan, Rioja, and Catamarca, and Señor Lozana has presented two Peruvian mummies to the museum. The collection of coins numbers 415 from the time of Pompey to Antoninus Pius: it was purchased in France for £240 sterling. There are twenty-two enamelled pictures of the conquest of Mexico; supposed artist Miguel Gonzales; it was presented by Mr. Mackinlay. The standard of Juan de Garay used at the foundation of Buenos Ayres, with two old swords of that date. Among modern relics is the writing desk of Rivadavia and his coffin, General Lavalle's sword, and the ornamental wheel-barrow of the Southern railway inauguration; also an infernal machine used to attempt the assassination of Rosas. The most valuable collection is that of natural science, comprising zoological specimens of the present time and antediluvian fossils of animals no longer known on earth. M. Bravard counts fifty specimens of the latter found in Buenos Ayres. We have a complete «Megatherium,» presented by Dr. Muñiz, the hind-part of a «Mylodon

robustus» found by Dr. Burmeister near the Rio Salado, and three kinds of «Mylodontes,» besides a «Scelidotherium»; a complete «Glyptodon» presented by Don David Lanata, the head of a «Toxydon,» and the fossil-teeth of an ante-diluvian horse from the Salado. The «mammiferi» comprise sixty-eight kinds in 110 specimens, of which forty belong to the San Martin collection recently purchased in France: the most important is the «Pichi-ciego» or «Chamyphorus retusus.» There are 1,500 bird specimens of 500 different kinds: one half from the San Martin collection, the rest from Europe, Brazil, and the provinces. The fish and amphibious specimens are of little value. The insects comprise a splendid variety of Brazilian butterflies, which cannot however be exposed to the light, but are kept in a dark room. In Botany we have samples of the beautiful woods of Paraguay, and an «herbarium,» of European plants imported from France. There is a valuable case of minerals from Chile, presented by the late Mr. Harratt; a box of geological strata perforated in Messrs. Sordeaux's artesian well of Barracas; a fossil willow trunk presented by Señor Pedriel. In the portico of the Museum may be seen an extraordinary wooden anchor, mounted with lead: this belonged to the Vermejo expedition of Mr. Cheney Hickman, who descended that river in 1852, but died of dysentery on the voyage and was buried on the Gran Chaco shore. There are also sundry fragments of a fossil whale, which reminds us that such remains have been found as far inland as Paraná city, 500 miles from the ocean, at a depth of sixty feet in the barranca or bluff. Dr. Burmeister has published a scientific dissertation on Palæontology, with special reference to the ante-diluvian treasures of Buenos Ayres, and complimentary allusions to the English geologists Lyell, Darwen, Owen, and others; also an essay on «Patagonian Macrauchenia,» illustrated with four handsome designs by the ill-fated Bravard. Respecting the Picaflor, or humming-bird, he gives eleven classes as inhabitants of the River Plate and Paraguay, although Azara reduces the number to six. He has also an essay on «Glyptodontes,» the most abundant fossils found in the country. Dr. Burmeister is member of twenty-six different literary societies, including some of the highest in Great Britain and North America. Valuable acquisitions are made from time to time, whenever the Government can supply Dr. Burmeister with funds for the purpose. In June 1867 a complete fossil monster called «Glyptodon Tuberculatus» was found near Villa Mercedes and purchased for $15,000. About the same time was bought a collection of eighty-seven stuffed birds and animals from M. Chanalet, for the sum of $35,000 m/c. The total collection in the Museum may be summed up thus: zoological specimens 1,620, samples of mine-

ralogy 1,030, coins 2,120, objects of antiquity and fine arts 30. The Museum is open, free of charge, on all Sundays and holidays between the hours of 10 and 2.

The *University of Buenos Ayres* adjoins the Museum, also forming part of the block originally built by the Jesuits. It was founded on August 9th, 1821, by Governor Rodriguez, and his Minister, Rivadavia. The solemn inauguration took place on the 12th of same month in the College-church, Dr. Antonio Suarez being sworn in as first Rector. The premises were used as a barrack until very recently. It is at present under the direction of Dr. Juan Maria Gutierrez, a distinguished scholar, and the staff of professors is equally respectable. The studies embrace the usual classic and scientific courses, besides modern languages, and degrees are given in theology, law, and medicine. There is a library for the students, comprising over 2,000 works, presented by the rector and other donors. A complete chemical apparatus, with electric battery, &c. has been reecntly brought out from Italy.

PUBLIC SCHOOLS.

The *Colegio Nacional*, formerly the Jesuit College, has spacious premises adjoining the Church of San Ignacio. Up to 1863 it was used as an Ecclesiastical Seminary, under the direction of Rev. Dr. Aguero and Canon Anciros, and contained ninety students. General Mitre's Government converted it into a Head Grammar School for all the Argentine provinces, confiding its management to Messrs. Jacques and Cosson: each province is allowed to send a certain number of boys for education, with board and lodging gratis. The sphere of studies is analogous to that of the University.

There are two city Model Schools: that called Catedral al Norte, in Calle Reconquista, was begun in May 1859 by public subscription, and solemnly inaugurated by the Governor of Buenos Ayres, President Derqui, and General Urquiza, on May 26th, 1860, the children of the schools assisting to the number of 8,000. The building is tasteful and commodious; the school-rooms are spacious, and well furnished with maps and books. Besides the ordinary classes, there is one of pupil-teachers in training as municipal school-masters. The branches of education are, science, modern languages, drawing, music, &c. The Model School of Catedral al Sur, was the first in these countries, having been originated by Don Domingo Sarmiento, then Director of Schools, and inaugurated on April 28th, 1858. The first board of Directors was composed of Messrs. Roque

Perez, Elizalde, Casares, Garcia, Toledo, Iraola, Billinghurst, Castro, and Pereyra: the funds were mostly raised by subscription. The premises adjoin the Provincial Government-house at the corner of Moreno and Perú, having been ceded by the Legislature for this express purpose: there are three large halls and others smaller, capable of accommodating 300 pupils. More than 1,000 youths have been educated here in the last eleven years, and a large proportion of these afterwards passed through the University. The studies include—Latin, English, French, German, mathematics, history, geography, drawing, music, and gymnastics. At first there was no charge for pupils, the institute being supported by voluntary subscription, but it became necessary to alter this, and the following scale of fees now rules—boarders, $500; externs, $100; externs with breakfast, $150 per month. The Municipality maintains thirty free schools, for boys and girls, in the various city parishes and suburbs, which are attended by about 2,000 children of all ranks in society. The masters receive a salary of $2,000 a month, assistants $1,000, and mistresses $1,300 (besides which the children's parents usually give them something). The expenditure entailed by these schools is set down at $834,000 per annum. The Department of Schools was established in 1852; under the direction of Dr. Barros Pazos, then rector of the University: in 1855 it was entrusted to Don Domingo Sarmiento, who established in five years as many as seventy public schools. There are at present 142 municipal and state schools in the city and province of Buenos Ayres, at which 8,000 children are educated. There are also 125 private schools in the city; the best of these are English, at which the usual fees are, for boarders $500, externs $100 a month. The Sociedad de Beneficencia, composed of charitable ladies, has charge of seventeen free schools for girls in the city, and forty-five in the country districts. The Diocesan Seminary, directed by the Rev. Canon Brid, is situate in Calle Victoria, close to the English cemetery. The Jesuit College in Calle Parque, corner of Callao, is a large building with grounds covering the whole «cuadra.» There is another lay college at the Balvanera, directed by French priests who are called Padres Bayoneses. Besides the day schools in connection with the English, Scotch, American, and German churches, there are boarding-schools attached to the Irish convent, Calle Rio Bamba, and the French convent, Calle Cochabamba; also a day school kept by French nuns in Calle Rivadavia.

CHAP. IV.

CHURCHES AND CHARITABLE INSTITUTIONS.

CHURCHES.

The city is divided into eleven parishes, and contains some fine churches. Besides the Cathedral, there are fifteen churches, six chapels of ease, and four Protestant churches.

The *Cathedral* is situate in Plaza Victoria, with a massive colonnade and fine front. Its dimensions are spacious, rendering it one of the grandest temples in this continent. Don Juan de Garay, in 1550, first marked out the site, and there is a tradition that the first bricks made in the country were devoted to this church. The Jesuits commenced a larger structure in 1621, but it fell in A.D. 1752, and was rebuilt by the architect Rocha, in the form that now exists, excepting the façade. In 1822 Señor Catellin was entrusted with the completion of the work, but this was paralysed during forty years of civil war, being only finished in 1862. The interior is imposing, the nave presenting a brilliant spectacle on feast days, when crowded with a congregation numbering some thousands, and the roof hung with flags taken in the wars against Spain and Brazil. The high altar stands nearly under the dome, which, with the cupola, rises to a height of 130 feet. There are twelve chapels in the aisles, possessing little in the way of fine arts. A proper organ is much wanted, and the choir is inferior. The Archbishop's throne is on the right of the high altar; the seats for the canons are of carved wood. The sacristy and baptistery are beyond the

right transept, and have a few paintings; one was a picture of merit and an artist took it away, leaving the copy in its stead. This side of the church communicates with the episcopal palace. The Archbishop officiates on all great feasts: the last Mass on Sundays and holidays is at 1 P.M. On the left side, are the halls for use of the Chapter, and here are the portraits of all the prelates from Dr. Carranza down to Bishop Medrano, eighteen in number. Four were natives of Buenos Ayres (including the brothers Arregui), five never took possession of the sea, and six were removed or died abroad. On May 12th, 1622, Fray Pedro de Carranza, Bishop of La Plata and Apostolic commissioner, raised this church to the rank of cathedral, and was its first prelate. In 1866 the see was created an archbishopric, under Dr. Mariano Escalada. The chapter consists of nine canons and four honorary canons; besides ten chaplains, and a dozen choristers and sacristans.

The *Merced*, at the corner of Calles Cangallo and Reconquista, was built in 1768, and had formerly a convent of nuns attached. The convent is now in charge of the Sociedad de Beneficencia, who use it as an orphanage: an annual bazaar is held for its support, the articles of needlework being admirable. The church tower is used as a city observatory.

San Ignacio, corner of Bolivar and Potosi, is usually called the College church, because formerly belonging to the Jesuits, whose college was alongside. Although the Jesuit order was expelled in 1767, they are still allowed to keep schools in Buenos Ayres; but their college has long been expropriated by the State, and is now a secular school, with a good staff of professors. The exterior of the church is very fine, with two lofty turrets: the interior is rather sombre.

San Francisco, corner of Potosi and Defensa, belongs to the Franciscan monastery, and is remarkable for richness of decoration. The first mention of Franciscans in this city is about the year 1594, and it seems their convent was established in 1601. In the suppression of religious orders, in 1822, this community escaped; but the convents of the same order at the Recoleta and San Pedro were suppressed. The community now consists of thirty mendicant friars. The sacristy possesses some curious old pictures. The cloisters and corridors are finely vaulted.

San Roque is a chapel of ease, adjoining San Francisco, and set apart for the especial use of Irish residents. Canon Fahy, or another of the Irish clergy, celebrates Mass, and preaches in English, every Sunday at 11 A.M.

Santo Domingo, corner of Defensa and Belgrano, has a large nave, with aisles: the high altar and side chapels are richly gilt. The Dominican convent has a prior and twenty mendicant friars. It was established in

1591, and suppressed in 1822; but, in 1835, Fray Inchaurregui received permission from Government to re-establish the order. This church preserves rare and valuable trophies, which are hung from the dome on certain feast days: they consist of four English flags taken from Whitelocke's army in 1807—an artillery, a royal marine, and two infantry flags. In one of the belfry towers are seen twenty-four cannon shot, thrown by the English fleet from the roadstead, on the same occasion. Some of the Dominicans are very able preachers: this church is also remarkable for the splendor of its ceremonials and processions.

San Telmo, Calles Defensa and Comercio, dedicated to the patron of sailors, is a small church on a high point overlooking the roadstead: a new belfry was erected last year. Adjacent to the church are the Men's Hospital and the Residencia Lunatic Asylum. The neighborhood, during the time of Rosas, was known as «Barrio del Alto,» and bore a bad name.

The *Concepcion*, adjoining Plaza Independencia, is a new church, from designs by Padre Marin. It remained unfinished for some years owing to the roof having fallen in, when some workmen were killed, in 1860.

Santa Catalina, in Calle Brazil, is a chapel of ease, built in 1860, in pursuance of a pious testament, with schools attached.

San Juan, Calles Potosi and Piedras, is attached to a convent of Capuchin nuns: the order was established here in 1749, by five nuns who came from Chile; the convent was first situate close to the church of San Nicolas, but afterwards removed to the present spacious premises. The order was excepted in the decree of suppression, in 1822, and has now thirty-six nuns, who live by alms and a small pension from Government. There are, however, some ladies of fortune among the community. The convent has a large garden, covering almost the entire block, in a very valuable situation. The church is attended by French priests.

Our *Lady of Monserrat*, adjoining the Plaza of the same name, is a handsome new church. The parish is reputed very rich, and the interior of the edifice is elegant and tasteful.

Las Salinas is the name of a chapel situate in Calles Victoria and Sarandi, attached to the Archbishop's college: the latter is under the direction of Canon Brid, and a staff of professors, including the Rev. Mr. Dillon. Another chapel is in construction in General Guido's quinta, Calle Potosi, by the Italian residents.

San Miguel, Calles Suipacha and Piedad, stands in the highest part of the city, and an extensive view is obtained from the belfry. There is a statue of Saint Michael over the entrance. An orphanage was at first attached to this church, and the Jesuit printing-press, from Cordova, was devoted to

its support. The orphanage is now attached to the Merced. San Miguel was founded in 1727 by Don Juan Alonzo Gonsalez, during the prevalence of a great plague in which the corpses were removed for interment by being tied to the horses' tails. Gonsalez was a native of Cadiz, and after his wife's death became a priest, bringing the first convent of Catalinas nuns from Tucuman to settle in this city. His son succeeded him as director of the Institute of Charity of San Miguel, which was suppressed in 1822: the second Gonsalez died in 1801, and there is a tasteful marble slab to his memory on the right of the altar.

San Nicolas de Bari, Calles Corrientes and Artes, is the favorite church of Italians, but has nothing of artistic merit calling for notice. The belfry has a public clock.

La Piedad is a small parish-church at the corner of Calles Piedad and Paraná. In the neighbourhood is a remarkable pine-tree, 100 feet high.

La Balvanera is a fine edifice, near the Plaza Once de Setiembre, with a college attached, under the charge of some French clergymen.

El Socorro, near the Plaza Retiro, is small and unpretending. Close to it is a garden that was formerly the British cemetery, until 1842, when Mr. Harratt purchased the present site in Calle Victoria.

Las Monjas, corner of Temple and San Martin, is a small church of some antiquity, attached to the convent of Dominican nuns, called Catalinas, whose order is very strict. The convent was founded in 1744 and was excepted from the suppression of 1822. There are forty nuns, each of whom at entering brings a small dowry; for the rest they depend on public charity: their garden occupies the whole block. The military of the Retiro attend Mass here on Sundays.

The *Irish Convent of Sisters of Mercy* is situate at the corner of Calles Rio Bamba and Tucuman; it has a chapel, schools, and hospital, under the patronage of St. Joseph. The community has its origin from Baggot Street Convent, Dublin. The first sisters were brought out by Father Fahy, in February 1856, under the superioress, Mother Mary Evangelist Fitzpatrick. They were first established in Calle Cangallo, till, in 1861, their countrymen built for them the present elegant structure. The community consists of about twenty sisters, of whom one-half are daughters of Irish sheep-farmers here resident. They make the three usual vows of poverty, chastity, and obedience, and a fourth for the service of the poor and sick. Their principal task, however, is the education of seventy boarders, the daughters of Irish estancieros, who pay £30 a year pension; and the gratuitous instruction of 200 poor native children of the neighborhood. They also feed, clothe, and instruct a limited number of orphans. The

boarders are taught English, French, Spanish, music, and needlework: no children are admitted under five, or over fifteen, years of age; they wear a uniform, and are allowed to see their friends on Sundays and holidays, between the hours of 10 A.M. and 5 P.M. The halls, play ground, &c., are spacious, and the chapel is very neat. The convent covers an area of two acres, or half a cuadra, and the northern wing consists of a hospital for sick and distressed Irish. The sisters also visit the sick of the neighborhood. They receive no subsidy from the State, each of the nuns having her own dowry on entering. The rules of the order were sanctioned by Gregory XVI., in 1841, and the Sisters of Mercy have now numerous establishments in Ireland, United States, and Australia.

The *Recoleta*, dedicated to Our Lady of Pilar, is attached to the city cemetery, about two miles from Plaza Victoria. The church and convent were built by the Franciscans in 1720, at an outlay of £4,000 sterling. There is a tradition that the site had been sold for a suit of clothes. The convent was suppressed in 1822, and in 1858 the building was taken for a Poor Asylum.

There are four Protestant churches; the English, Scotch, American, and German.

The *English Church*, near the corner of Calles Mayo and Cuyo, is a handsome and commodious structure, capable of accommodating about 700 persons. The treaty of 1825 guaranteed Protestants the fullest religious liberty, and the Argentine Government had the generosity to cede this site gratis for an English church, and for the last forty years a chaplain has been attached at the expense of the British Government. Previous to that date (1827) the Protestants assembled for Divine service in a private room, where the Foreign Club now stands. The present chaplain is the Rev. J. Chubb Ford, a graduate of one of the English universities. Divine service is held every Sunday at 11 A.M., and in the evening. Two pews, marked A and B, are set apart for ship captains. The new organ presented by Mr. Lumb is a splendid instrument, and cost £500. Attached to the church are the English parochial schools, attended by about 100 children of both sexes, and under the charge of Professor Ryan.

The *Scotch Church* is in Calle Piedras, near Calle Rivadavia, and of the same simple architecture as usually characterises Presbyterian houses of prayer. It was built in 1838, at a cost of £7,000, and has seats for 300 persons. The first Scotch colony came to Buenos Ayres in 1827 with the Messrs. Robertson, and their countrymen now number over 2,000 in the camp and town. There are two Scotch chapels, at San Vicente and Chascomus, with resident clergymen, and the British Government allows

a subsidy for their maintenance. The first chaplain was the late Rev. W. Brown, D.D., whose successor is Rev. James Smith, deservedly popular among men of all persuasions. Divine service every Sunday at 11 A.M. and 7 P.M.: there is a fine choir. The Scotch school was founded in 1842, and has been successively managed by Mr. Ray, Rev. Dr. Brown, Rev. J. Smith, Mr. Ramsay, and Mr. Augustus Powell: the last-named gentleman has directed it already thirteen years, on the Glasgow normal training system: the average attendance is sixty pupils, and the curriculum includes English, French, Spanish, Latin, &c. The school-room is spacious, and sometimes used for lectures.

The *American*, or Methodist Church, is in Calle Cangallo, opposite the Hotel du Provence; it holds about 300 persons, but the congregation intends providing a better chapel. The actual incumbent is Rev. Mr. Goodfellow, of the American Missionary Society, who has initiated a system of children's lectures on moral training. There is a Sunday school, the children of which have a grand annual fête. Several tracts on religious subjects are distributed by the curate. Divine service on Sundays 11 A.M.; also in the afternoon.

The *German*, or Lutheran Church, is in Calle Esmeralda, between Piedad and Cangallo. It has a pretty Gothic façade and porch, and holds about 300 persons; it was built in 1847 by the German residents, and is almost too small for the present congregation. The chaplain is the Rev. Mr. Gehrke, who has also charge of the schools attached. Divine service at 11 A.M. and 7 P.M. on Sundays. The choir is the best in the city. The architect was the late Mr. Taylor.

CEMETERIES.

The *Recoleta Cemetery* is much too small, covering only ten acres; here the inhabitants of the city have been interred for three centuries. Some of the tombs are grand and costly, but the place is so crowded that they appear to no advantage. The place is very much neglected, and the practise of disinterring remains after a certain number of years is a violation of the most hallowed associations. Rich persons by paying fifty years purchase are guaranteed against removal. Poor people can buy graves for five years, at prices varying from $10 to $100m/c, according to locality. The mausoleum of Bernardino Rivadavia, the illustrious statesman of 1828, is the finest, and stands in the central avenue. Opposite to it is a monument which will call the special attention of Englishmen, as it marks the resting-place of a valiant countryman, the

famous Admiral Brown. On a flight of marble steps, covering the vault wherein are deposited the remains of the gallant admiral and his wife, rises the base of the structure, the principal portion of which measures 4ft. by 5ft. and the upper 3½ft. by 3½ft. The main shaft is 12ft. high, with a Corinthian capital bearing a naval trophy of gilt bronze 5ft. high: total height from the ground, 28ft. 6in. Upon the base are well executed «relievos» of the following naval engagements:—11th June, 30th June, Juncal and Emperatriz; also the arms of the Republic, initials of the deceased, and a graceful epitaph bordered with wreaths of shamrocks. A band encircles the column, upon which is the inscription «Guillermo Brown.» Springing from the leaves of the capital is the trident, and surmounting all a trophy of «rostra.» The total cost was $10,000, about £300, and the site was given by Government. The whole of the work was executed in Buenos Ayres, from designs by P. Beare, C.E.: the castings weighed over five tons and were made in the establishment of F. Carulla. The epitaph, translated from the Spanish, is as follows:—

WILLIAM BROWN,

BORN ON THE 22ND JUNE, 1777, AT FOXFORD, COUNTY MAYO, IRELAND.

OF BRITISH ORIGIN, BUT ARGENTINE BY HIS SERVICES.

He commanded in chief the first fleet in the War of Independence,
bringing glory and triumph to our flag, A.D. 1814, destroying
the Spanish navies at Martin Garcia and Montevideo.
Sweeping the Pacific Ocean and Caribbean Sea from 1815 to 1818.
The ports of Callao and Guayaquil witnessed his prowess under the
Argentine banner, on January 20, and February 1, 1816.
The sun that shone on February 9, June 11, and July 29, 1826,
in the waters of La Plata, and on February 9, 1827, in the
River Uruguay, beheld the vessels of the Republic confided to Admiral Brown
crowned with victory in supporting the Independence of the Sister State.
He died like a true Christian, on the night of May 3, 1857, surrounded
by his family, overshadowed by his great name, and at the ripe
age of eighty years, having consecrated his life to naval glory.
His Widow dedicates this Monument to his memory,
and asks from all brave and grateful men a
Remembrance and a Prayer.
R. I. P.

The monuments of the Typographic Society and the Spanish Charitable Association are handsome edifices. Not far hence is a stone with the inscription «Señor Alvarez, assassinated by his friends!» Besides the natives there are numerous Irish and French buried in the Recoleta. On the north side, against the convent wall, is a marble slab to the memory of the first Irish priest who came to Buenos Ayres, some forty years ago. Near the entrance-gate are the monuments of Colonel Brandsen, who fell in the battle of Itazaingo, A.D. 1827, and Captain Meyer, killed in the civil war of 1864. Besides this cemetery another has been recently opened in the south end, near the Convalecencia.

The *English Cemetery*—About the year 1821 the English residents in this city obtained from the Government a general charter in due form for the establishment of a Protestant Cemetery. A short time afterwards a small plot of ground was purchased near the Socorro Church, which for several years was used as their burial-ground; its dimensions were, however, soon found insufficient, and in the year 1832 Mr. John Harratt purchased the present site, and transferred the ownership to the British community of Buenos Ayres. It is situate at the corner of Calles Victoria and Pueo, about a mile and a quarter from Plaza Victoria, covering a «manzana» of 150 yards square, nicely planted and walled in. There is a neat mortuary chapel, in the centre, and the tombs are of varied taste and nationalities, including all classes of Protestants. The Germans have a quarter to themselves, and English, Scotch, and Americans occupy the rest. There are some very sad mementos, such as naval officers accidentally drowned in port, and persons killed in civil commotions. The visitor may pause at the grave of Mr. Priestly who was shot at his own door in a street-riot, or at those of Mr. Mason and General Asboth, late American Ministers for the United States. There is a touching record in a tablet, near the entrance, to the memory of Mr. Taggart, an American resident, who was drowned in rescuing some ladies from drowning in the Lujan river. No coffin is allowed to be laid at less than eight feet from the surface, and the great majority of the coffins are lined with lead. Nevertheless there is an agitation to close up the cemetery and oblige the Protestant residents to take a new site further out of town. A municipal decree has been passed to this effect.

HOSPITALS.

Few cities are better supplied than ours with institutions for the relief of the sick. The Municipality maintains two hospitals, for men and women,

irrespective of creed or nationality. There are also the English, French, Italian and Irish hospitals, and the Sanitary Institute: this last is one of the finest establishments in South America.

The *Men's Hospital* was founded by Don Juan de Garay under the patronage of St. Martin, a block of ground being marked out for the purpose in the distribution of the city. A building was commenced in 1611, and from that time the accounts of the establishment were submitted regularly to the Cabildo, till 1748: in this year the Bethlamite monks took charge of the hospital, and when their order was suppressed the establishment passed into the hands of Government. It was directed by a Philanthropic Society from 1828 to 1833, after which Rosas supported it by a subvention of $12,000, till the French blockade, when he suppressed it altogether as unnecessary: he, however, allowed it to be re-opened by several charitable persons in 1848, allowing a subvention of $15,000 per annum, till his fall, in 1852. Since then it has been maintained by the Municipality at a cost of nearly $2,000,000 per annum. It is situate at the corner of Calles Comercio and Balcarce, and is attended by twenty French Sisters of Charity, who treat the patients with the utmost kindness and care. The physicians are ordered to prescribe wines, delicacies, &c. *ad libitum* for those who require it. Old and infirm people have also an asylum here and are allowed a little pocket-money for tobacco and yerba. The average number of patients is over 4,000 yearly, of which eleven per cent. die. The proportion of nationalities is—Argentines 42, Italians 13, Spaniards 11, French 8, Germans 6, English 2, other nations 18 per cent. The average cost of a patient is $10 a day. The officials comprise —an administrator, two clerks, a chaplain, six physicians, nine medical students, and three apothecaries. The establishment also comprises a military hospital, and one for sick convicts.

The *Women's Hospital*, under the patronage of St. Michael, was established in 1743, by Padre Juan Alonzo Gonsalez and a Confraternity of Charity, with accommodation for ten patients. In 1784 the house was much enlarged, and again in 1823, when it passed under the charge of the Sociedad de Beneficencia, which association of benevolent ladies still directs its management. The hospital is under the care of fourteen Sisters, called Daughters of Mary, brought from Italy in 1859: the mother house and noviciate is in Montevideo, where these nuns have charge of the Caridad Hospital The order was first established in Italy in 1829, for caring the sick and teaching children: there are branch houses at Santa Fé, Rosario, and Cordoba. The Women's hospital is at No. 26 Calle Esmeralda, and it has often been proposed to remove it from so central

a locality to the suburbs, but there are no funds to build a new one. The Sisters receive a trifling pension of $200 a month. There are 200 beds, the average number of patients admitted being 800 per annum, of which 27 per cent. die. The officials include a chaplain, three physicians, one student, an apothecary, and seven nurses. The total annual expenditure is about $500,000m/c. It is very usual with wealthy citizens or estancieros to leave donations to this and to the Men's Hospital.

The *British Hospital* is a fine, airy, commodious structure, standing at the southern extremity of the city, on a high ground, known as Horn's hill, with a pleasant prospect. It was built in 1859 at a cost of £3,000, the British Government contributing one-half. A bazaar was held at Colon theatre in October 1859, which almost redeemed all the debt, and in 1862 the American Circus of Spalding and Rogers gave a benefit which realized £500: a marble slab has been put up in one of the corridors in gratitude for the same. For the last few years an amateur English Dramatic Club has given annual performances with signal success, at the Victoria theatre, in aid of the hospital. The local subscriptions also amount to about £600 per annum. There are two wards, one for opulent patients at $50, the other for humbler classes at $20 per diem. Patients are admitted gratis when certified to be distressed British subjects. The resident surgeon, Robert Reid, Esq., M.D., is a gentleman of acknowledged talent and success, and the returns of patients, operations, &c., are most favorable. In 1867 a shed was erected in front of the hospital, west view, for the reception of fever patients. During the cholera of the following year the institute did good service, no fewer than 72 cases having been admitted, of which more than one-half were discharged cured. The matron, Mrs. Blues, died of the epidemic. The expenses of the hospital are about $250,000 per annum: the receipts for the years 1865-67 (not including $97,361 from the Amateur Dramatic benefits) were as follows:—

	1865.	1866.	1867.
Subscriptions, ...	$128,871	$92,112	$78,248
Donations, ...	12,070	20,585	2,500
Visitors, ...	2,210	1,247	1,000
Fees, ...	97,064	91,325	150,527
	$240,215	$205,269	$232,275

Comparative expenditure in meat, groceries, bread, milk, &c.:—

	$133,747	$121,454	$133,340
Number of patients,	459	462	522
Cost of each, ...	$590	$520	$464

A large proportion of the patients is made up of sailors and distressed British subjects, which causes a considerable deficit, that has to be defrayed by local subscription. Before 1859 the British Hospital was situate in very confined premises in Calle Independencia. The committee is composed of H.B.M. Consul, the English and Scotch chaplains, and five subscribers annually elected.

The *French Hospital* is in Calle Libertad, half a cuadra from the plaza of that name. It was established in 1862, and placed in charge of four Sisters of Charity brought out from France for the institution. A bazaar was held at the Club del Plata in 1861, which produced a handsome amount for the hospital. There is a very neat chapel, consecrated in 1863, and a compounding department, besides accommodation fer thirty-five sick people. During the cholera these pious daughters of St. Vincent de Paul rendered great assistance to the poor, and the Superioress fell a victim to the epidemic. During the Paraguayan war they have also attended the military hospitals, both in this city and at Corrientes. The French Hospital is supported by subscription.

The *Italian Hospital* was begun by Count Cerutti, Italian Minister, in 1858: owing to lack of subscriptions the works were suspended for a time, but resumed by Count La Ville, Italian Consul, in 1862. The situation is good, being quite close to the British Hospital, at the corner of Calles Bolivar and Caseros. The edifice is large and airy, with a handsome façade: in the hall is a fine statue of Charity, in Carrara marble, and the staircase is the best in the city. The blessing of the chapel took place on the 27th December, 1863, the Bishop officiating, and the sponsors including the Pope's Nuncio, the Italian Minister, the President of the Republic, and the Governor. In 1865 it was converted into a military hospital for wounded Brazilians from the seat-of-war; in 1867 it was used as a cholera hospital for the city, and subsequently there was a project to buy it for the Municipality, and transport the Women's Hospital hither. At present it is closed up, but will, probably, ere long be devoted to its real purpose, the reception of sick Italians. The committee consist of the Italian Consul, the Vice-Consul, and 100 subscribers.

The *Irish Hospital*, in Calle Rio Bamba, was established by the Sisters of Mercy in 1862, a wing being built to the convent for the purpose, and the expense defrayed by the Irish sheepfarmers. The wards are spacious and well-ventilated, but generally empty; in fact, the number of sick among the Irish residents bears no proportion whatever to their population. The nuns have a House of Refuge attached, where fifteen orphan girls are brought up at the expense of the convent. During the cholera the hospital

was full, and the Sisters were untiring in their attendance on the sick. One of the Irish priests acts as chaplain both to the convent and the hospital.

The *Sanitary Institute*, on Calle Buen Orden hill, is one of the finest establishments in the country, built with an utter disregard to expense, and supplied with every comfort and luxury in the way of sanitary arrangements. It was opened in June 1868. The grand entrance faces on Calle Buen Orden, and is back from the street about twenty yards; on either side in the garden in front there is a handsome *jet d'eau;* ascending the steps the stranger enters a stately portico, with Corinthian pillars, and, on entering the hall, finds on one side the apothecary's department, and on the other the telegraph office, which connects with the central office at 31 Calle Tacuari. The outward hall or passage, which runs around the building, leads to the various chambers of sickness and convalescence; the space intervening between this hall and the round room in the centre, which is the chapel beneath the dome, is occupied by various saloon dormitories for the patients, each and all opening on the chapel in the centre, the altar of which revolves, so as to be seen by all the patients; and the beautiful stained-glass windows of the various departments open on the chapel in question. Ascending to the second flight we find the rooms, the hall, and the dormitories precisely in the same order as on the first floor, with the exception that the hall opens upon a charming terrace, which commands the finest view in the city. Aloft is the dome, which is an immense iron cistern, containing several hundred pipes of water, pumped up by steam from the premises in the rear; each room is supplied with hot and cold water baths, patent ventilator, gas, and electric bells, with windows looking out on the gardens. The institute receives subscribers on payment of $30 m/c monthly, or $300 m/c a year, in advance, by which they are qualified, when sick, to enter and remain until cured; a clean airy apartment, with suitable food, medical adviser, physic, and attendance, are supplied. For the use of sailors the proprietor, M. Lassance, has made the following regulations:—1st. Every vessel, on entering port, can have her crew insured, provided always that she can show a clean bill of health. 2nd. Each member of the crew shall pay $50 m/c. 3rd. Any individual taken ill eight days after will be admitted. 4th. The $50 above-mentioned only pays the mariner for three months. 5th. If the vessel brings sick, the doctors attached to the establishment shall classify them into «Positive short cure» and «Doubtful long cure.» The former will only be treated as externs, paying so much a day, the latter will be admitted on chance, that is to say, for the sum of $500 m/c they are cared and attended until quite

restored. Non-subscribers can be accommodated, whilst ill, with private rooms and all requisites, at from $50 to $100 per day. Subscribers desirous of extra privileges can obtain them at half-price. Medical Staff—Dr. Luis Drago, President of the Board of Health, one apothecary, and two assistants. Consulting Physicians—Drs. William Rawson, Ventura Bosch, Nicanor Albarellos, Teodoro Alvarez, Toribio Ayerza. Free visits for the poor on Mondays and Fridays. Hours—From 8 to 9 A.M., and from 4.30 to 5.30 P.M. The drugs for the poor, ordered by the physicians of the establishment on the above days, will be compounded in the dispensary for half the regular prices. Patients are at perfect liberty to bring in any member of the faculty they choose for their own account, and the resident physicians will always assist without fees at a consultation called by the patient's particular doctor. The town office is at 31 Calle Tacuari. The site of the hospital was formerly included in Balcarce's quinta. The edifice was begun in 1866: it has the appearance of a rotunda, and can be seen from the city. There is a fine kitchen garden attached, to raise vegetables for the house. Subscribers or patients are admitted without any distinction.

CONVALECENCIA, POOR AND FOUNDLING ASYLUMS.

The *Convalecencia*, or Lunatic Asylum, is about half a mile from the Plaza Constitucion, on a hill overlooking Barracas. It takes its name from a hospital founded by the Bethlemite monks. The present new building was erected in 1859, at a cost of $2,000,000, the Legislature providing one-half: the architects were Messrs. Hunt and Schroeder. The edifice is spacious, being the only asylum for male and female patients in the country: they were formerly confined in narrow and unwholesome quarters at the Residencia. It is related by Pillado that in 1785 there were but seven lunatics in Buenos Ayres. The average number of patients is about 400, of whom 28 per cent. are cured. The Men's quarter is under the charge of a manager, a physician, and fourteen keepers: that of the Women is managed by nine Italian «religieuses» called «Daughters of Mary.» who receive a pension of $200 a month, having been brought out expressly at the request of the Municipality; there are also a chaplain, a doctor, and seven servants. The expenses of the Women's asylum are paid out of the Provincial revenues of Buenos Ayres, and administered by the ladies of the Sociedad de Beneficencia, amounting to $320,000 per annum. The Men's asylum is supported by the Municipality, at a cost of $370,000 per annum.

The *Cuna*, or Foundling Asylum, is situate at the back of San Francisco, facing the Debtors' prison, with the touching inscription «My father and mother have cast me out, God's pity has sheltered me here.» The innocent victims of shame or distress are kindly brought up, and not unfrequently attain a good position in society. Infanticide is unknown, thanks to this institution. There is a staff of seventeen nurses, under the direction of six Italian nuns; also a physician and a chaplain. A new asylum has been erected near the Convalecencia, where forty weaned children are cared for. The parents may claim a child up to two years, but after this term it becomes the property of the institute: at a certain age the children are given out, with consent of the Juez de Menores, to respectable families who engage to rear and educate them, making them also useful in domestic service, giving account of them when required by the Sociedad de Beneficencia, and not taking them out of the country without a special permission. Notwithstanding every care given to the poor foundlings from the first moment, about one-third of them die, and 4 per cent. are claimed by their parents, who in this case have to pay a small retribution to the institute. The Cuna was established by Don José Riglos and the Vice-roy Vertis, in 1779, from which time it remained under charge of the civil authorities till 1823, when the Sociedad de Beneficencia was formed. It was suppressed by Rosas in 1838, and re-established in 1852, since which latter date over 300 children have been received. The annual expenditure is $600,000.

Female Orphan School.—This institute was begun at San Miguel church, in 1755, by the Confraternity of Charity, which being suppressed in 1822, the asylum then passed into the hands of Government. Rosas did not suppress the institute, but merely obliged the orphans to dress in red, the color of his party. The orphanage now exists in the suppressed convent attached to the Merced church, under the direction of the Sociedad de Beneficencia. Previous to the cholera of 1867 the number of orphans was limited to thirty-two, but the sad effects of the epidemic caused Governor Alsina to increase the number permanently to seventy-five. There are also 100 externs educated in the school. There are two mistresses, seven assistants, a chaplain, three visiting masters, and a staff of servants. The annual expenditure is $400,000.

The *Asilo de Mendigos*, or Poor Asylum, is situate in the extinct convent of the Recoleta, adjoining the cemetery. Buenos Ayres has always been almost free from mendicity, although Parish represents a few beggars in his time who used to go about on horseback. A few lame or blind men still make their rounds on Saturdays, afoot. The asylum was established

by the Municipality in 1858, and inaugurated by Governor Valentin Alsina: at the end of that year it contained seventy-nine mendicants. The first committee of direction was composed of Canon Fuentes, Dr. Pinedo, and Messrs. Martinez, Varela, Pintos, Fernandez, Billinghurst, Cabrera, Zinny, and Señorans. The average number in the asylum is about 200, of whom three-fourths are whites, including some foreigners and old soldiers. The treatment they receive is very good. The Municipality contributes $60,000 a year, and the rest is made up by voluntary subscription. Previous to 1858 the convent was used as a barrack: the situation is very fine, commanding an extensive view over the River Plate.

Los Ejercicios is a kind of female penitentiary at the corner of Calles Salta and Independencia. The institute was founded in 1791, by a nun named Maria Antonia Paz, from Santiago del Estero, in a house in Calle Piedras now occupied by Señor Terrero: it was transferred to its present site before the death of the founder, and has since been ruled by five superioresses. In 1859 the Bishop reformed the rules. There are usually 100 persons in the house, between nuns and penitents, the latter being sent hither by the Tribunals. The establishment receives a pension from Government and various public donations.

Sociedad de Beneficencia.—This society of charitable ladies was founded in 1823, to take charge of the Women's Hospital, Foundling Asylum, Orphan School, and the State schools for girls. It was installed by Rivadavia, the founders being Mesdames Cabrera, Mandeville, Aguirre, Sanches, Ramos, Boneo, Agüero, Azcuenaga, Viamont, Luca, Izquierdo, Lasala, and Gutierrez. It was partly suppressed by Rosas in 1838, and revived under Mme. Garrigos in 1852. Since then it has rendered invaluable service, remodelling the above-mentioned institutions and establishing seventy female free schools in town and country, which are attended by 5,000 children.

Deaf and Dumb Institute, 481 Calle Cangallo: it was founded in 1857 by a philanthropic society called La Regeneracion, and placed under the direction of Mr. Charles Keil. The Provincial Government pays a subvention of $12,000 a year, and the rest is borne by the society. The children are taught reading, writing, arithmetic, drawing, Christian doctrine, &c., but their number rarely exceeds half-a-dozen. They afterwards earn a living as cigar-makers, boot-makers, &c.

CHAP. XI.

THE MOUTH OF THE RIVER PLATE AND PORT OF BUENOS AYRES.

THE APPROACH TO THE RIVER.

The depth of this river increases from the spot where it is joined by its two great tributaries to the sea, and the bottom is oozy, and in some places rocky, to the meridian of Montevideo. From here it changes, and its proximity to the ocean becomes gradually apparent, for the ooze is mixed with sand; as the mouth of the river is approached the sand is finer, and mixed with shells and rocks, the northern bank only remaining oozy. The rocks (tosca) are principally found on the southern coast, from the Saladillo to the little bay of Barragan. The bottom at this part of the coast is very hard, and the water shallow, the width of the bay being two or three leagues. The different bottoms of sand, shells and sand, and rocks and sand, situated to the east of the meridian of Montevideo, may be considered as an immense bank, known at its culminating point as the English Bank. The bed of La Plata is full of banks and quicksands, extending for more than thirty leagues to the east of its mouth, and from thence inwards, obstructing its course and rendering the navigation to Buenos Ayres difficult for vessels of a certain tonnage. We will again refer to these dangers in Vol. II. The tinge of the water of the La Plata, produced by lime, extends for more than twenty leagues into the ocean.

Islands.

It is only on the left bank they are to be met with, which is rocky, while on the opposite side not a stone is to be found. The principal are Lobos, S.E. of Maldonado; Gorriti, in the same bay; Flores, east of Montevideo; San Gabriel, Lopez, and Farallon, opposite Colonia; Hornos, north of these; Martin Garcia, near the delta of the Paraná: besides these there are several rocky clusters more or less distant from the coast.

Banks.

The principal ones are the English (the most dangerous), the Archimedes, Medusa, Chico, Nuevo, Big and Little Ortiz, Las Palmas, &c. As far as Maldonado there are no banks, but from that to Montevideo the English Bank must be rounded; and if the south passage is taken Archimedes and Medusa also: if Buenos Ayres is the destination all must be passed. To reach Montevideo a pilot is seldom employed; but rarely indeed are the services of a pilot dispensed with when going up to Buenos Ayres. Formerly, before the creation of the ports of Montevideo and Maldonado, mariners preferred the southern shore, passing the English Bank, and those bound for Buenos Ayres stopped at the port of Barragan. Such was the dread inspired by the dangerous banks supposed to be at the mouth of the La Plata that seamen dubbed it «the sailors' hell,» and the insurance on its navigation was equal to that paid from Europe to its mouth, it being considered a miracle to escape. Few were the merchant vessels to be seen on its bosom, and a war vessel never except in time of war. The vessels most frequenting it were Spanish, but never above 500 tons. No vessel sailed on it by night, which was always passed at anchor, and the course steered was by the eastern side of the Ortiz Bank; but, according as the river became better known, and ports sprung up, the fear inspired by the banks decreased, and the navigation of the river made great progress, aided by the exact and detailed charts introduced, and the pilot service that was organised. If we are to believe the writers and sailors of the last century, it should help to dissipate our terror to know that hurricanes were then less frequent than formerly, nor were they so violent as in the first years of the river's discovery. From the time that ports were made at Montevideo and Maldonado, and the northern shore of the river better known, navigation by the southern side was completely abandoned, whether through the want of good points of observation, or the few ports or harbors to be found along it, or that but little was known of it, or the exact situation of Cape San

Antonio, until the necessity of avoiding the English cruisers off Santa Maria and Maldonado obliged the Spanish vessels to find a new passage to the south of the bank, sailing by parallels 35 deg. Sou. to 36 deg. until arrived at the meridian of Montevideo, and then making for this port, or Barragan, or Buenos Ayres, as the case might be. This course, once safely opened, it has so continued, until, with the establishing of so many lighthouses, the river is now entered by the northern side.

Anchorage.

Wherever the lead shows that the bottom is oozy an anchor may be let go, taking care, however, to give a wide berth to the banks, lest the ship might drag on to them. With winds from the south the southern side is preferable, from other points the northern is best. Large vessels can get as far as Montevideo, while vessels drawing fifteen or nineteen feet of water can fearlessly ascend as far as Buenos Ayres or the Hornos Island. As shelter from the N.N.E., E., and S.E. winds the best parts are Hornos, Montevideo, and Maldonado, although the latter is not perfectly sheltered from the S.E., which reaches the anchorage through the pass of Gorriti. The Bay of Barragan, and the roads of Buenos Ayres, are sheltered from S.W. winds. Small vessels can anchor off Cape Santa Maria, at the entrance of the Santa Lucia, and off Colonia, on the northern shore; in the Tuyú and Saladillo rivers, the Bay of Barragan, and the Riachuelo, near Buenos Ayres, on the southern. Ships can anchor at Maldonado in six or eight fathoms; in the roads of Montevideo, four to six fathoms; in the harbor, two to three fathoms; in the roads at Barragan, three fathoms; the roads of Buenos Ayres, three to six fathoms; near the city, two to three fathoms. Against S.W. winds the anchorage on the northern shores is best, against those from the S.E. the others. Of all these anchorage grounds that of Maldonado is the best, as the bottom is oozy, covered with sand. In the others the bottom is mud, in which the anchor cannot hold during strong winds.

Lights.

The lighthouses of the La Plata in this part have considerably improved of late years. At present there are five stationary and five floating lights; the first-named are placed on the Island of Flores, the Cerro of Montevideo, Colonia, and the Custom-house of Buenos Ayres. The floating lights point

out the following dangers: the English Bank, Panela Quicksands, New Bank, Little Bank, and the roads of Buenos Ayres. We will give in their proper place detailed particulars of these lights, leaving it as granted that their combination greatly facilitates the entry and navigation of the river during the night. The first light known in the Rio de la Plata was that of the poop lantern of the Spanish frigate Loreto, lost off San José in 1792, and placed on the Island of Flores. This light was afterwards removed, in 1798, to the Cerro of Montevideo, experiencing a thousand vicissitudes, until one light was established on the island, and another on the Cerro.

Beacons and Buoys.

There are many along the river, but complete confidence cannot be placed in their stability, as the force of the current often tears them away, or, what is even worse, displaces them, for then, instead of acting as a warning against danger, they lead to it. The principal beacons are those on San José Point, at Montevideo, and at the Martin Garcia channel. The Bell Buoy on the English Bank disappeared during a tempest, and has never been replaced.

THE PORT OF BUENOS AYRES.

The port is no better than any other on the river, the anchorage not being good, in consequence of the softness of the bottom, which allows of the anchors dragging when the wind blows from the N.E., this wind traversing the roads in an oblique direction, and raising generally a heavy sea. The anchoring ground is divided into the Outer and Inner Roads, formed on one side by the City Bank, and on the other by the Camaroues Bank, which is a ramification of the great Palmas or Playa Honda Bank. The Port of Buenos Ayres being but a very indifferent one by nature, and hitherto neglected by the authorities, it is insufficient for the trade of this vast emporium. No captain considers his ship safe whilst anchored in these offings (it being impossible to call the «port» anything else), as every gale of wind from S.W. round to N.E. imperils his vessel. Many schemes have been proposed for constructing a harbor and docks; but as yet nothing has been done.

In the early part of 1869, Mr. Bell of Glasgow arrived out for the purpose of surveying the port, in company with Mr. Miller of the same place. After a minute study and survey, the plans were drawn up, and proposals sent into Government for the purpose of constructing docks and building warehouses. The plans have not been made public; but, in the month of March, 1870, all questions being definitely settled, the Government concluded the contract. A company for the purpose of carrying out the same is being formed, having for its representatives Mr. John Proudfoot in England and Mr. Edward Madero in Buenos Ayres. The enterprise is one of the most important for the maritime commerce of the Port of Buenos Ayres, and being in such good hands will doubtless prove a reality. In Vol. II of this Handbook a copy of the concession, with a full description of the scheme, will be given.

Meantime, attention is turned to the adjacent rivulets and available advantageous points as adjuncts for relieving the port: hence comes the importance of the Riachuelo, the Capitania of San Fernando and the Tigre, and even Ensenada, which is eight leagues off. Thus the Port of Buenos Ayres may be considered as extending from Ensenada to the Tigre. And the nautical observations and directions in this chapter must prove useful to those engaged in the trade of the River Plate.

The Outer Roads.

Consist of a channel half a mile wide and three to four long, stretching N.W. to S.E. by E., between the City Bank and that of Las Palmas. The water here is from nineteen to twenty-four feet deep, with a muddy bottom, but at the eastern entrance there is a bar preventing the ingress of large vessels of war; on the bar there is only a depth of seventeen feet of water, so large vessels are obliged to remain outside. A good point for a large vessel to anchor in nineteen feet of water and muddy bottom is four miles distant from the mole of Buenos Ayres, with the tower of the Residencia bearing W.S.W. It is the nearest point of the outer roads where a large vessel can lie. A little further north the depth increases one or two feet; this is also a good station, keeping in a direct line with the belfreys of Santa Catalina and San Nicolas, or marking them from the south 81 degrees west. The tower on the Residencia is the most conspicuous object on shore, and is situated in the southern part of the city. This point is called the Amarradero, because in former times all European vessels anchored here.

Palmas Bank.

Is also called Playa Honda, is very wide, and is formed by the sand driven down by the Uruguay and Parana. On this bank the water does

not shoal rapidly; nevertheless, great care must be taken in sounding, and not to pass seventeen feet with a vessel drawing fifteen or sixteen feet.

The City Bank.

The bottom on this bank is hard, and the water shoals more rapidly than on Las Palmas, and greater precautions must be taken to avoid grounding. The bar once passed the depth increases gradually, and the bottom becomes softer. When a depth of eighteen feet is reached, in order to lie as near land as possible, the anchor should be let go, when the bearings are as follows:—

Custom-house,	....	....	S. 38 deg. W.
Rocoleta Church,	....	....	S. 64 deg. W.
Residencia, ...	....	....	S. 30 deg W.
Guard Ship, ...	....	....	S. 50 deg. E.

Distant 2′ 2″ miles.

The best ground is in a depth of twenty-three feet at low tide. It is a kind of channel, outside of which the water is shallower. This anchorage is situated exactly in the centre of a line three miles long from N.W. to S.E.; this is where all the vessels in the Outer Roads anchor, from the Guard Ship outwards. The Guard Ship is anchored to the N. 72 deg. E., from the Custom-house, distant 3′ 7″ miles. The channel alluded to is 3′ 5″ miles from the mole.

The Pozo Anchorage.

Vessels having only fourteen feet draught will here find fifteen feet of water, oozy bottom, the Rocoleta Church bearing S.W. and the mole-head due south. To reach this anchorage it is better to take a pilot, although it is not difficult to get to it if the following directions be observed:—Sailing towards it from the Outer Roads, the course to be steered is north 60 west, for a little more than two miles, and then edging away S.W. by S. as marked on the chart, until the spot already referred to be reached.

Inner Roads.

They are also called Las Valizas, and extend over a short distance a mile and a-half long by three cables' lengths wide, running parallel to the coast from S.S.E. to N.N.W. and formed by the City Bank, and the river side; near the latter is a reef of rocks. To get in, vessels must not draw more than thirteen feet of water, and a pilot is necessary. The holding is bad, as the bottom is rocky, covered with ooze, and anchors drag easily; the waves rise very high when the winds come from the S.E., and a storm from

this point generally drives some vessels on shore. Good cables are absolutely necessary for anchorage in these roads in a storm from the S.E., as no help can be expected from the shore should they prove faulty. In such a case the river is greatly swollen, and the vessels drive on to the banks near the city, to the imminent risk of the lives of their crews. Some river trading vessels often set sail and run for Las Conchas to the W. of San Isidro point, which is sheltered from the S.E. wind. It must here be repeated that no vessel of tonnage should attempt to reach either the Pozo or Inner Roads without a pilot, as in order to reach them the channels near the City and Camarones Banks have to be gone through, which can only be done through landmarks combined and laid down, of the existence of which a foreigner is generally ignorant. Besides, the marks laid down for the guidance of pilots in the beginning of this century are of no use to those of the present day, in consequence of the change of position of many of the banks and channels, a change sufficiently apparent if the charts of the Buenos Ayres roads, drawn out by the Spaniards in the last century, be compared with those of Mons. Barral in 1831, and Mr. Sidney in 1856. To the west of the Pozo anchorage, and a little nearer to the city, there is a channel through which vessels drawing less than ten feet eight inches of water can pass. It is a shelving of the City Bank, called Santa Catalina Canal, with less water than the Pozo, and is much frequented by steamboats, saving them about two miles distance; but the greatest experience is required to pass safely through it.

Anchorage.

As both roads are exposed to the S.E. wind, and the high sea which it raises when blowing strong, two anchors must be let go N.E., S.W., with plenty of chain, say seventy to eighty fathoms each. It would always be well to select a spot free from ships to the S.E., so that if the wind should come from this quarter there may be no ships ahead to run foul of you, an accident very common in this port, and generally having fatal results. With the wind from other quarters the roads are safe, and even during the pamperos, the most destructive winds in the River Plate, the water is smooth. The bad weather often prevents communication between ships and the shore. The ships being anchored so far off, communication with the shore is laborious and sometimes difficult, days often passing before passengers can land. For this reason, all vessels should anchor as near shore as possible.

Precautions.

When entering the Outer Roads great care must be taken to avoid the many sunken vessels. Two hulls have already disappeared, embedded in the mud, and the others may be considered as so many hidden rocks, often without buoys. The position of all of them is perfectly known to pilots. Care should be taken in shallow water not to run on the anchors of other vessels, and when at anchor to ride with a long chain, in order not to run on your own anchors. Accidents of this nature might prove fatal in case of a fall in the river. Many captains prefer riding with a single long cable, holding themselves ready to let go another anchor if required. As so many vessels are constantly anchored in both roads, a good position should be selected clear of other ships, in order to avoid fouling, an accident that occasions many losses. The Pampero wreck in the inner roads is still visible.

Piers.

Before such existed passengers and goods were landed in carts, that went out to meet the boats, at a distance of two or three cables' lengths from the shore, but since 1855 there are two handsome piers built of wood and iron, of from 400 to 600 metres in length. That in front of La Merced is for passengers, and that opposite the Custom-house is for goods. They are, nevertheless, not of sufficient length, for when the river is low, luggers, or even boats, have not sufficient water, and the old system of carts has to be resorted to. The depth at this part of the bank is little, in consequence of the gradual accumulation of slime. The merchandise brought by large ships, and also all that is exported, is carried in luggers destined for this purpose.

Position of Buenos Ayres.

The geographical position of this city was determined by several Spanish commissions at the end of the last century. They established an observatory in the Cabildo, and put under contribution several celestial phenomena, which aided by chronometrical comparisons with the meridian of Montevideo gave as a result 34° 36′ 38″ S. lat., and 52° 11′ 38″ W. long., which shows but a slight difference when compared with Mr. Barral's observations, thus proving the correctness and delicacy with which the Spanish geographers and astronomers of the last century worked. The difference they found between the meridians of Montevideo and Buenos Ayres was 2° 10′ 16″. (See Second Memoir of the Hydrographical Direction, published in Madrid, edition of 1809, page 7.) The variation of the needle is calculated at 10° N.E. for 1868; the annual decrease in the variation is estimated at five minutes.

Floating Light.

The Guard Ship stationed to the south of the Outer Roads carries every night a fixed red light, which can be seen six or seven miles off in fine weather. The Guard Ship is painted black, and has three masts; her principal duty is to watch over the safety of the port. She is anchored in sixteen feet five inches of water, at three to five miles to the north, 72° east of the Custom-house, and forty miles north 74° west of the floating light on the Chico Bank, so that steering this course from the Chico light the Outer Roads are reached.

Port Lights

Every night on the Custom-house tower a white light is placed, which taken in conjunction with the floating light, points out an easterly course to the Outer Roads.

Tides and Currents.

The tides are of average regularity in the roads of Buenos Ayres; when the weather is fine their mean rise is about three feet six inches. The rise lasts for about five hours, and the fall seven, running at the rate of from one to two miles an hour, but when the wind is strong the tides are very irregular. Strong winds from the S.E. cause the river to rise, and from the opposite quarter, N.W., to fall, so much that the difference of level between the rise and fall is often fourteen feet three inches. On occasions of strong wind from the N.W., so low has the water often been that vessels have been left almost high and dry. In Vol. II. we will remark on this difference of level which is about ten feet five inches.

Water Provision.

The vessels anchored in the roads generally supply themselves with water from the river itself. The best point for this purpose is to the east of the Ortiz bank, particularly during westerly winds when the water is smooth.

Provisions.

The Buenos Ayres market supplies the sailor with all kinds of provisions, both for daily and sea use. Naval stores of all kinds can also be had from Messrs. Herring, Allinson, and Eckell, and repairs can be effected in the Tigre, at Messrs. Kay & Stephens', Marshall's and others, but at great cost; any aid rendered to vessels also is charged highly for.

Pilots.

There is a corps of pilots organized under the inspection of the Captain of the Port, for the use of vessels navigating the Plate and its affluents.

These men have by law the status of marine police agents in matters relating to their profession. They are obliged when entering a ship to inform the captain as to the navigation laws, the police regulations of the rivers and roads, the system of lights during the night, signals during hazy weather, &c. All pilots are provided with the river police rules, in which their duties are set forth, and rules for navigation laid down whether for night or day, sailing or steam vessels, in order to avoid collisions or other accidents. These rules are printed in five languages, Spanish, French, English, German, and Dutch, for the convenience of navigators, and a copy can be had free at the Port Captain's by any captain or master of a vessel, in order that he may not be able to plead ignorance. It is not laid down by the rules what remuneration the pilots should receive for their services, which is arranged by the pilots themselves every year, at a meeting held for the purpose, and the tariff once agreed upon it is shown to the Port Captain for his sanction. The tariff at present is more moderate than it has been for some years, as are also the port dues. In 1833 a foreign ship of 300 tons and fifteen feet draught of water, bound for Buenos Ayres, with cargo paid—

Pilotage and entrance dues from the Punto del Indio,	$420
Port pilotage, ...	90
Port dues, ...	300
Inspection and stamped paper, ...	30
Notary's charges, ...	18
Pilotage outwards leaving the river, ...	420
Port pilotage, ...	90
Port dues,....	300
Stamped paper, health, and notary, ...	50
	$1,718

These enormous expenses frightened away foreign ships. A pilot from Montevideo to the Punto del Indio cost $700; but has since been immensely reduced.

THE RIACHUELO.

This rivulet forms a canal where the rain water from the surrounding flats runs into, and to which the waters of the River Plate penetrate during ordinary tides. Its principal mouth, for it has two, is about a mile S.E. of Buenos Ayres. If by dredging and other hydraulic works, the Riachuelo was a little improved upon, it would, no doubt, be the real port of the

capital. Notwithstanding its shallow entrance and the obstructions of the banks, it is the general refuge of small craft; and once inside there is complete shelter for all necessary operations. Inside the Riachuelo there is from fourteen to seventeen feet at low water, but on the bar there is often not more than three and a-half feet, hence vessels drawing more than ten and a-half feet have to wait for a risen river to enter. In this natural port there is a spacious wharf on its left bank, where the numerous coasting vessels discharge and take in their cargoes. On its right banks are the saladeros, from whence are shipped the staple products of the country, such as wool, hides, tallow, &c. Of course, there are also numerous shops and taverns providing for the wants of the numerous maritime population. Here also small vessels are hauled up for repairs of all kind. The greatest inconvenience of the Riachuelo is the putrid state of its waters in summer, owing to the refuse from the saladeros, the stench being overpowering in warm weather. Years ago there have been projects for the canalization of the Riachuelo, so as to admit ships of all sizes, and the cutting out of docks in its adjacent flats; and in February, 1869, President Sarmiento directed the Government engineer to draw up plans for cleansing the mouth of the Riachuelo.

THE BARRACAS.

This is a point further inland on the Riachuelo, two miles from its mouth, from whence there are two roads to the city, and in connection with one of which a bridge spans the river. Its inhabitants are dependent on the neighboring saladeros and produce warehouses. It is now connected with the city by the Boca and Southern railways.

ENSENADA DE LOS OLIVOS.

On passing the Retiro Point, which is the northern limit of the port of Buenos Ayres, and where the present gasworks are situated, the coast recedes to the west, and forms the bay called as above, having its northern limit at Point Olivos or San Isidro, distant nine miles from the Retiro, bearing N. 40 deg. W.

POINT SAN ISIDRO.

This is a «barranca» of some sixty-eight feet high. Along this coast, about two miles to the west of Buenos Ayres, may be seen the celebrated palace of Rosas, called Palermo, where the Dictator used to reside in the summer months. Some two and a-half miles further on may also be seen the fashionable rising town of Belgrano. The coast is very shallow, and the canal narrow.

PALERMO BANK.

Is a sandbank in the Ensenada de los Olivos, and near which the rivulet Cobos discharges its waters into the Plate. The towns of San Isidro and San Fernando are close to. The first of these is abreast of Point Olivos or San Isidro, two miles inland, and numbers a good many inhabitants. San Fernando is distant two miles to the N.W. from the former, and is equally well populated. When the new wharves are completed, the port of San Fernando will be of much importance.

RIVER CONCHAS.

Its mouth is about four miles distant from Point San Isidro, bearing N.W. one-quarter W. This river has sufficient water in it during the rising of the tides in the Plate to admit coasting vessels of all classes, numbers of which abandon their anchorage in the roads of Buenos Ayres during S.E. gales to take refuge here. Yet it requires practical experience of the place to run in safely, as the channels wind through the great bank of Playa Honda, and the soundings are very irregular near the coast. There is a good anchorage, with eighteen feet of water, in front of the coast of San Isidro, but it requires pilotage to reach it.

LAS CONCHAS.

Is a small town, similar to the previous ones mentioned, situated on the right bank of the river of same name, about three miles inland. Its inhabitants cultivate their lands and rear cattle. The Tigre may be called its port; a place of rising importance and already described.

DELTA OF THE PARANÁ.

Past the river Conchas the coast stretches to the northward, and its aspect is entirely changed. Low islands, covered with wood, and hemmed in by the great flat of Palmas or Playa Honda, which stretches out twenty miles to the S.E., having one end in the bay of Olivos and the outer roads of Buenos Ayres, and the other at the entrance to the Uruguay, even as far as Martin Garcia. All this accumulation of islands and banks, constitute the Delta of the Paraná.

PARANÁ DE LAS PALMAS.

Between the many islands mentioned above are the channels by which the waters of the Paraná enter the Plate. These channels are arms of the river, and their entrances bear separate names, the most prominent ones of which are the Capitan, Mini, and the Palmas, the latter being of good extent.

PARANÁ GUAZU.

This is the name for the principal entrance to the Paraná, distant twenty-five miles from the river Conchas, bearing N.N.E. It is the only channel by which large vessels enter the upper river. The other channels, even when there is sufficient water, are narrow and tortuous, and hence are only frequented by coasters well acquainted with their windings.

LARA AND SANTIAGO BANKS.

These are to the E. and E.N.E. of Point Lara, and to the N. of Santiago. It is not safe to pass between these two banks, as there is scarcely twelve feet of water. There is but little difference on the outer bank, it having some nine feet all over. The bay of Barrangan will be found between the banks near Points Lara and Santiago.

QUILMES BANK.

On passing Point Lara the S.E. end of this bank commences, and stretches abreast of Buenos Ayres, hence one end is called the Quilmes Bank, and the other end the City Bank. It is of sand, or sand and mud, which the lead will indicate sufficiently distinct.

PAMPEROS.

In the River Plate, this is the name for the strong winds which come from W. to S.S.W., and so called from their coming over the great plains called Pampas. They may be classified into two categories—local pamperos and general pamperos. The first is of short duration, and even when it blows strong the sky is clear. The general pampero, on the contrary, comes in squalls and gusts. They have their origin in the Andes mountains, and are the great storms of these latitudes. These are the pamperos proper, called «dirty» in the country, and generally lasting three days. In the first hours, particularly after noon, the pampero is most tempestuous, accompanied by rain and thunder; but when the sky clears, a fresh breeze follows, with fine weather. When the pamperos come in force they last sometimes for fifteen or twenty days, and vessels lying in for the river are much knocked about by the heavy sea which they raise. When the wind shifts to the S. or S.E. and E. in general it becomes clear then, and good weather is established.

But though the pampero is stormy and to be dreaded, it is not so terrible or dangerous as the S.E. gales. If a vessel caught by such a gale is obliged to enter the river, there is no other resource than the anchors, close to a bank, if possible, but even close on shore there is no alternative. As the S.E. gales always bring rainy cloudy weather with them, it is difficult for the navigator to make his port. If a vessel is thus caught outside the river, and not very far, she is in danger of being driven on the coast of Castillos. Thus it is a S.E. gale is more to be feared than a pampero, and experience shows that the wrecks nearly always are caused by winds from the second quarter.

The Approach of a Pampero.

Coming from Europe these winds are not generally met with until lat. 30 deg. or 32 deg. S. is reached. If the wind freshens during the day from N. or N. W , and continues so after mid-day, there is certain change of weather; the change will be a pampero if the wind veers to the fourth quarter, and a mist rises, with lightning in the S. or S.S.W. It is time then to take in sails, and prepare for the squall. The approach of these storms is also indicated by any webs entangling in the shrouds of a ship, by the prevalence of insects brought by the hot winds, by the rise or fall of the river, and the suffocating heaviness of the previous northerly winds. The barometer shows it by a great fall.

The Commencement of a Pampero.

The sudden coming on of a pampero in summer, is during clear weather and a fresh breeze, when a vivid lightning appears in the S.W. If it is daytime, and the squall may be seen coming, or if the wind suddenly shifts to the N.W. or W., and thence to S.W., no time should be lost in making everything ready. A pampero may also come after a calm day and hot weather, and at times follows after strong N.E. winds, when the sky is overclouded.

Duration of a Pampero.

If, after a pampero has set in, the wind is strong from the second quarter, and it continues to rain, it indicates a lengthened duration. The weather will not settle without many squalls from the S W., which will lighten the atmosphere. If, after the rising or setting of the sun, there is a lull in the wind, it denotes a subsidence or change, and though it may blow strong afterwards it will not last long. When a pampero is about to cease, the wind veers to the W., and the atmosphere clears up; the land breeze will take its place if it be morning, if evening then the N.E. or S.E. sea breeze.

In summer pamperos are but of short duration, but in winter they sometimes last long; occasionally they pass round to the S.E. and then render the coasts obscure. During the nights it does not blow so strongly. These pamperos cleanse the atmosphere, as the N.W. winds in the meridian of Spain, and generally there is a clear sky while they last.

«Turbonada» or Squalls.

Such is the summer pampero called, and at times it bursts with terrific violence, though, happily, but of short duration. If a ship is under sail when indications of such a squall is seen, it may be prudent not only to have the smallest possible canvas on, but also to dip the upper yards, without a moment's delay. «In 1828,» says Captain Fitzroy, «we came very near to be dismasted and capsized during a pampero, although the sails were all lowered or close-reefed: it is therefore wise to take immediate precautions when the indications appear. It may be that such a squall as we then experienced may not again be felt for thirty years. Twenty pamperos out of thirty are not dangerous, and some are only ordinary storms of short duration, and whose advent need not be feared. Years may pass without any very terrible pamperos occurring. From 1828 to 1833 there were none of very great violence, but in the latter year we had three of very great force.» Nearly always when a pampero is about to cease, the wind subsides or veers to the southward. Sometimes these storms extend out to sea, even beyond the latitude of Santa Catalina. If they come with clear weather, they last longer than when the sky is overcast. But in the Plate, and outside its entrance, the winds are very variable.

The Summer Season.

During the fine season, which is from September to March, N.E. winds are prevalent; the atmosphere is hazy, and the sky covered with clouds of undefinable formations. As the river is approached, the winds will be found to go round to the E., and at times blowing fresh from the S.E.; with rain and dark weather. Inside the estuary, in good weather, the wind generally will be found to pass round the compass in twenty-four hours. A gallant-sail breeze blows from the S.E. in the evening, replaced by a similar one from the N.E. at night, followed next day by a light wind from the westward or a calm, gradually going round to the S.

«Virazon,» or Sea Breeze.

This is the name for the breeze which has just been mentioned. When it is not prevalent, or baffled by winds from N. and N.W. a «turbonada»

from the S.W., more or less strong, must be expected before the sea breezes are settled. If it is hazy from sunrise until eight or nine o'clock in the morning, the «virazon» is pretty sure to follow. When the weather is settled, the wind in the morning is generally N. or N.N.W., moderate breeze, until ten or eleven o'clock in the morning. Then commences a fresh breeze from outside, from E.S.E. to E.N.E., gradually lessening after sunset, until near midnight, when it generally becomes a calm. From midnight until dawn it goes round again to N. and N.E., and again traverses the same course during the day. Thus, in general, land breezes are prevalent at nights, and sea breezes during the day, until the equilibrium of the atmosphere is upset. The Spanish pilot, Don Claudio Vila, thus describes the weather of the River Plate:—«Good weather generally lasts fifteen or twenty days. In the mornings northerly winds blow strong and warm, increasing with the day, and at noon the sky is overcast and hazy. Soon after, a squall appears forming in the fourth quarter, with another in the S., both sending forth vivid lightning. Ordinarily the changes extend over two days, during which more or less rain falls, the atmosphere is charged, and heavy black clouds are driven to and fro by the available winds prevailing. After this and a heavy thunderstorm, the sky is clear as a bell all over the third quarter, when a pampero begins to blow, but which only lasts for the day, the wind passing rapidly to the second quarter with serene weather.» Sometimes during ordinary weather, instead of a clouded sky, there is rain and fresh winds; but it is not easy to foretell from whence the clouds or wind will come. If from the N., bad weather is likely to follow; and if the wind does not go round to the south, even when it looks clear, the good weather will not then be of much longer duration. The more overcast becomes the sky, and the more it rains and blows from the N., the stronger it must blow from the S. to clear the heavens. During the warm months of summer, when it does not rain much to refresh the earth and atmosphere, the northerly wind is suffocating for man and animal, and the inhabitants attribute baneful influences to it. While it lasts the barometer is low, and continues to fall as it freshens, which may be for three days; the atmosphere is charged with electricity, and it ends nearly always with a gale, when the wind veers to S.W., and the equilibrium is renewed. Near the full and new moon there is generally a breeze from the S.E., with some rain; at other times the wind continues from the N., but not so strong as that from the S.E., and with a higher temperature. The pilots of the Plate say that S.E. winds will prevail if the declination of the moon is southward, and N. winds if the dip of the moon be northward; in the latter case, N. winds will nearly always go round to

N.E. if it be dry weather, but if there be rain or dew, then it is inclined to be N.W. At times it freshens up strong, accompanied with squalls, and runs round to S.W., clear weather: this wind brings a high sea, followed soon by a calm.

The Summer Season in Buenos Ayres.

According to the observations of M. Thoyon, of the French navy, the winds are lightest in these parts from December to March, as also more regular than during the other months of the year. It is usual for the breeze to pass in the evening to the N.E., N., and even N.N.W., blowing strong from the latter point in the morning, but eventually running to N. or N.N.E., and subsiding into a calm about eleven o'clock; in the afternoon it revives from the E. or E.S.E., until dark, when it returns again to N. The pamperos, or S.W. winds, are very rare during these times. In summer, as in winter, N.W. winds are warm, rainy, and disagreeable; whilst the S. winds, after their first stormy advent bring bracing weather and a clear atmosphere. Easterly winds are cold and wet, except the sea breezes in summer. Westerly winds give dry days and agreeable weather. Summer is the worst time to be in the roads of Buenos Ayres, because the S.E. winds are generally fresh during the day, and cause an awkward sea, rendering harbor work and communication with the shore rather difficult.

Winter Season.

The prevalent winds at the mouth of the Plate from March to September are W. and S.W., but inside they are generally from the fourth quarter. At this season, when the weather is very good, the wind goes round with the sun as in summer; but this only happens perhaps once in a fortnight. In general the wind is from S. to E. or from N. to W., blowing more or less strong successively from these quarters. N. winds bring rain, thunder, and lightning, S. winds hail, and those from the E. heavy rains. If the wind follows round with the sun, the weather is settled; but if it shifts inversely, then bad weather and strong winds may be expected. Pilot Vila says:—«In winter, if the wind comes from N.E., increasing, and remaining fixed

for one or two days, with thick weather, it is dangerous then to navigate the river without experience, especially as the islands and coasts at the entrance cannot be made out, whilst the current is setting in strong. After venting its strength from the second quarter, the wind passes to the first, without ceasing to rain; it remains there for a day or two, settling in the N. on the fourth. At the time when it enters this quarter there will appear a black horizon from the S.E. to W.N.W., then a clear space appears, and a strong pampero will begin to blow on the instant, clearing the sky before it. This wind continues from S.W. to W.S.W. for five or six days, clear weather and light clouds, and at the same time the current from the river begins to set out strongly. The pampero will be followed by winds from the second quarter, which bring on rain again; before long it shifts to the first quarter, and then to the fourth, to be followed again by a furious pampero, but which will not last long, and brings settled weather.» Although S. winds are more frequent and of longer duration in winter than in summer, and though N. winds generally prevail in summer, yet, at times, they occur from the opposite directions. During winter, S. winds are persistent storms, whilst in summer they are shorter, though often strong and violent.

Winter Season in Buenos Ayres.

In these roads winter is preferable to summer, because the common winds are S.W. to N.W., which leaves a smooth river and easy communication. M. Thoyon made the following observations on this season:—«The pamperos are most frequent from June to October, otherwise there are fresh and variable breezes, with many days of calm, rain intervening between these changes. A strong breeze from the E. is almost sure to be followed by a stronger one from the W., and *vice versa*, whilst the weather will not settle until the wind remains in either N. or S., according to where it commenced. Thus, a breeze that springs from the W. passes to S.E., freshening up when it reaches E. or N. E., will leap to the N.W. with a squall, returning again to W.; but the weather will not be good until the breeze springs up again from N.» It may be remarked as traditional among the inhabitants of the Plate, that about Santa Rosa's holiday, which is at the latter end of August, there is always a storm: the hurricane of that period in 1860 was terrific, and twenty vessels were lost in the roads of Buenos Ayres and Montevideo.

Fogs.

During autumn and winter, more especially at the mouth of the river and on the Ortiz Bank. fogs are of frequent occurrence. Don Miguel Lobo, of the Spanish navy, thus speaks of them: «If at new moon, during autumn, the weather is hazy, with light S.E. winds, it is likely to last so for the whole month, thickening as the moon wanes, but disappearing for a short time at nine or ten o'clock in the morning. Sometimes at sunrise the fog seems gathered in the first and second quarter, but it spreads rapidly over the horizon, enveloping everything in more density than usual, and is later in clearing up. At these times fine weather is enjoyed; and, if, during the fog, it is a little humid, when that clears up, no better weather could be wished; about mid-day a light sea breeze sets in, going round to the N. later on. This most agreeable weather in the windy climate of the Plate is interrupted occasionally by a strong S.E. gale, which lasts a few hours only, and is shown by a slight fall in the barometer, which, it should be remarked, stands high when the fogs are most dense and frequent. After this weather generally follows S.W. winds, commencing in the W., the barometer beginning its fall twenty-four or thirty hours before the change occurs.» Inside the river fogs are not so general, as in Buenos Ayres they appear seldom but for a few hours.

Rains.

These are very irregular in the Plate, but are more so in autumn and spring than during the rest of the year; but when it does rain, more water falls than in many parts of Europe. It is remarked also to be more plentiful during day than night, which is the reverse of the other hemisphere. The dews are also very heavy in these regions, equal indeed to a light rain in some parts of the world. It is not less surprising the dampness which prevails at times in the Plate, being such in Buenos Ayres that it affects metals and furniture, and rooms fronting to the south have damp floors and walls. According to Señor Azara, it is a sign of rain when a bank of clouds rise on the western horizon about sunset. Heaviness in the head when northerly wind prevails, also indicates rain, and lightning appearing in the S.W. In the city of Buenos Ayres it is a sure sign of rain if the north coast of the river is visible.

Refraction.

There are times, mostly during westerly winds, when the river presents some strange examples of refraction. It is the general belief in Buenos Ayres when the coast of the Banda Oriental is seen from that city that a change of weather is at hand. This refraction is not always the same, as at times it permits one to see the tops of the hills of San Juan, which are some thirty-six miles off to the N.N.E., whilst at other times the islands of the Paraná and the coast between Colonia and Martin Garcia are visible. During such weather it is difficult to make any nautical observations, and impossible to regulate any chronometer in the roads of Buenos Ayres. What has been stated concerning the winds, both outside and inside the Plate, must be considered as usual or general; but they may happen to the contrary, as they are so variable that no absolute rule can be set down as to either their point or duration, and the experience of successive years may be entirely reversed some seasons.

The Barometer.

Although in the River Plate the rise and fall of the barometer are not very great, nevertheless its indications are almost always correct if consulted carefully. In settled weather its highest point is 760 milimetros, and its general range is within 13m. to this in ordinary weather, but much more when severe changes occur. In the months of July and August the barometer is highest, and in that of June it is lowest. Its highest is during winds from S.E. to N.E., when it reaches even 778m. If the wind rounds to the N., the mercury will fall, and will continue so until N. W. blows. W. and S.W. winds produce the lowest barometer: thus it is that before a strong pampero the barometer will fall to 746 or 744, and even to 741, but ordinarily 746 is below the gradation of the River Plate. The rising of the glass when the wind is S. W. indicates that it is about to cease or change to S. A high barometer, overcast sky, but red at sunset, threatening aspect, with distant lightning, a rising river and a strong current setting in, more especially above the Ortiz Bank, are all signs of a coming S. E. gale. From whatever point a storm comes, or if the weather is murky, the barometer falls; but no sooner has it blown over, and the weather cleared, than it rises again. If it has set in for bad weather, the barometer remains low, until the wind be S.W., when a clearing pampero sets in; it is the same after some hours of great heat. In Buenos Ayres the

barometer falls with E. and S.E. winds, but soon rises if they die out, and will not again fall if the breeze does not spring up from the W., and then, if good weather, its change is but very little. If W. winds continue, and the barometer still falls, then it will blow again from the E. In general the barometer announces easterly winds by rising, though they may be fresh breezes, and westerly winds by falling; but storms or gales of wind, from whatever quarter, are always indicated by a fall. According to the observations of Fitzroy the river is low when the glass is steady, the gradation at such time being 29.9 English (or 758m.); and he never noticed it to be above 30.3 (769m.) or lower than 29.4 (745m.)

Electricity.

In summer, or indeed it might be said, during the whole year, thunder-storms are very frequent; so much so that perhaps the River Plate experiences more of them than any part of the world. They often cause damage to vessels, houses, and churches; but such accidents are not of such recurrence as one might expect from the vividness and rapidity of the lightning. Señor Azara states that during a N.W. storm on the 21st January, 1793, thirty-seven thunderbolts fell in the district around Buenos Ayres, killing nineteen persons.

Temperature.

It is of common experience to have in the one and same day a touch of the four seasons of the year, such is the extreme and rapid variation in the temperature. And though such sudden changes may affect the health, still it is certain that the climate of these parts of South America is excellent, never suffering from very extreme cold or warmth In Buenos Ayres the highest thermometer in summer is 30, and the lowest in winter 2 above zero, some rare instances having brought it down to zero: snow is also very seldom seen in these regions. The average temperature of Buenos Ayres is one or two grades higher than that of Montevideo, probably to be attributed to the proximity of the latter to the sea, and some other topographical differences.

Tides.

Captain Heywood says of the tides:—«The tides of the River Plate are far from being regular, the run of the current being so uncertain in velocity, duration, and direction. It is, therefore, impossible to base any calculations upon them, so that the lead has to be used for ascertaining both the soundings and the running. When it is calm weather the currents generally are not strong, and set in or out pretty regular. The currents always vary with the wind; thus, they run eastward along the northern coast of the river when the wind is N.E., but set in, westward, strongly along the southern shore during a S.W. or pampero, the water rising amazingly: both these currents produce the contrary effect on the opposite shores. The river is lowest during N.N.E. or N.N.W. winds, and at such times the current running out is on the south shore, but generally does not exceed three knots an hour; on the northern it is never very strong.» Ovarvide, during a long cruise and many anchorings about Cape San Antonio and Sanborombon Bay, up to Cape St. Mary, gives it as his opinion that the tides at the mouth of the River Plate are generally regular, being only disturbed by heavy storms and high floods, so that the irregularity, caused by the wind, concerns more the inside. He states that in the anchorage of St. Clement the tide rises six feet, running N.W. for flood, and S.E. for ebb. At the Rodeo anchorage it rises six feet five inches, and runs N. for flood and S. for the ebb. Off the tosca shores of Point Piedras it is high water full and change at 11h. 15m., rising six and a-half feet, and running N.N.E and S.S.W. In the port of Paloma (Cape St. Mary), the tides rise regularly five and a-half feet. At Maldonado, the highest rise during ordinary weather is six to seven feet, running S.E. for the flood and N.W. for ebbing. It should be remembered, nevertheless, that in all these ports if north winds continue long the rise is not so great, and, on the other hand, if strong south winds set in there will be two feet more water, even exceeding that at times, outside winds always causing higher tides.

Tides in Buenos Ayres.

M. Thoyon, of the French navy, remarks that the tides at Buenos Ayres are more regular than might be supposed, and pretty accurately ascertained if the observation of the weather be attended to. He states that the flood sets in generally for five hours twenty-one minutes, and the ebb seven hours five minutes: high water full and change at 7h. 47m., ordinary rise ten

feet eight inches. «Comparing observations,» says the same author, «and taking into account the prevailing winds, which, undoubtedly have an influence, the irregularity of the tides is not so considerable as generally supposed. It will be seen, though the difference be not much, that with outside winds, such as N.E. to S.E., the flood will commence earlier than the calculated hour, succeeded by a proportionate longer ebb: and as ordinarily the flood is of shorter duration than the ebb, it is easy to deduce that the flood will set in earlier and be of longer duration during N.E. or S.E. wind, but it does not much affect the succession of tides. The flood makes in undisturbed during N.W. to S.W. winds, and the ebb is not affected if it does not blow strong from the S.W. As has been stated, the tides are pretty regular with ordinary winds from all quarters, but more so when the wind is E. or N., even when these blow fresh. The wind has more influence at high water, in checking the ebb, than during the flood; therefore when it blows from N.E. round to S.W., the water is dammed in longer, whilst the Paraná and Uruguay continue to discharge, so that the consequence is a much higher water and a later ebb. The reverse of this occurs with winds from N. to W. The difference in the rise of water at two consecutive tides is rarely more than three and a-half feet; but on some occasions, when the wind has been the same for several days, the difference has been known to be ten or eleven feet, and with N. and W. strong winds the difference has even been twenty feet—the water falling from thirty feet two inches to ten feet four inches. But these are very rare occasions, and it requires a combination of circumstances to produce them. As a rule, the rise and fall is not more than nineteen feet eight inches, and not less than six feet eight inches, giving ten feet eight inches as the average.»

Low Tides.

Very low tides are occasioned by strong winds from N.W. to S.W. In 1792 such a wind lasted three consecutive days, and the consequence was to leave the great River Plate nearly dry in most parts. During the Independence War an extraordinary event happened in this respect: the river was so low that the Spanish squadron anchored in the outer roads blockading Buenos Ayres were left aground, and the bank between the two roads appeared dry out of the water; the Argentines seeing this passed over some artillery to attack the squadron, and opened fire on a brigantine which was almost on her beam ends; but that moment the water began to

rise, and they had to retire. So fast indeed did the flood flow in that, by the time the artillery got back to cross the inner roads, only the horses' heads appeared above water. Señor Azara remarks :—The River Plate may be considered a gulf of the sea, though it preserves the freshness of its water twenty-five or thirty leagues below Buenos Ayres. The strong tides of the southern coast do not prevail here, and the water does not rise or fall according to the floods in the river, but is mostly affected by the winds, thus E. or S.E. wind will cause an additional rise of seven feet.

General Movement of Waters.

In regard to this M. Duperier remarks :—«Two causes affect the movement of the waters of the River Plate; one is the proportionate strength and duration of local winds, the other, it is not certain, but presumed, is attributable to the prevailing winds, whether along the north shore or from the south at the mouth of the river. Easterly winds, and the adjacent points, will always cause the water to rise along the whole river; northerly winds produce low water in the left channel, and high water in the right channel. Winds from W. to S.W. will cause the water to fall in the whole river, as far as the Ortiz Bank, except in a part near Colonia, where the water rises in the left channel. It is true that the extent of this rise or fall will depend much on the force of the wind, but the pressure of such a mighty body of water is sufficient to move the current from one channel to the other. Respecting the rise and fall which are without any apparent local cause, it may be said they are common to the whole river. Though these effects are well known, it is not easy to ascertain their immediate cause; if observations were taken at the one and same time at several points of the river—say Montevideo, Colonia, Martin Garcia, Buenos Ayres, and the south extremity of the Ortiz Bank or Point Indio—it might be possible to arrive at some solution of this phenomena, especially if added to the experience of many years.» As yet, however, the pilots of the river are content with knowing by experience that always when fresh northerly winds blow, or N.W., even also N.E., the river falls considerably, and the current runs to the S.E. and S.; and when pamperos or S.E. winds prevail, then the river rises, and the waters run S.W., or N.W., according to the channel. But there are occasions when, without wind or any visible cause, the river rises and falls considerably. It may be these are owing to high tides out at sea, or perhaps to floods in the two great affluents, the Parana and Uruguay; if the latter, then fresh water ought to flow in the

centre of the river, leaving the shores to brackish water. The movements of the water depends also on the shiftings of the breeze. However, by attending to the rising and falling of the river, and noting the direction of the current, the change of weather can be predicted almost to a certainty. Before S.E. wind, running along the shores, the river begins to rise in the roads of Buenos Ayres. Many hours before a pampero sets in, and sometimes a whole day in advance, the water rises in the port of Montevideo. When the waters make eastward, shunning the northern shores, then N.E. winds may be expected. A S.E. or S.W. gale may be expected if there is a rush of waters in, and the actual rise of water will indicate more or less the force and duration of the approaching storm: it has been known to rise twenty-one and a-half feet. The lowest river is always with the wind from N.N.E. or N.N.W. which produces an outward current, felt the strongest along the southern shore, but seldom exceeding three or four knots an hour: ordinary tide currents are from one to one and a-half knots an hour. Within the harbor of Montevideo, if the water rises rapidly when a strong pampero blows, it continues so for two or three hours, and then as rapidly retires, producing a current against the wind, which in its turn causes a cross sea very annoying to vessels, especially those near the mole. During N.E. breezes the waters run up along the northern channel, but it has the inverse effect in the opposite channel. With the wind from N.E. to S.E. the waters run in a westerly direction, causing a slight rise as far as the meridian of Montevideo, but much more so above the banks inside the river.

Currents.

As has been stated, these are not regular within the Plate; generally following the direction of the wind. Many times they indicate in advance a coming wind: thus, if the water rises longer than during ordinary flood, and it is calm, or wind from N. by way of W. to S., then a N.E. or S.E. may be expected.

Pilots.

These are taken in at Montevideo if the vessel calls there, or at the lightship off Point Indio if she enters the Plate alone. There are always pilots in the lightship ready to board any vessel making signal for such. Though these parties are experienced and acquainted with the channels.

captains should not always place blind confidence in them, but keep a vigilant look out, consulting their charts, and taking all precautions with the lead, &c., whilst passing the most dangerous channels. Hence, these pilots are looked upon more as advisers than trusty guides; therefore, when the position of a ship is doubtful, and it is seen the pilot is not fully up to his business, then it is better to let go the anchor at once. Yet the rate of these pilotages are high enough, caused probably by the incomplete directions respecting the hidden dangers of the river, its uncertain and irregular soundings, as well as the fear of the traditional pampero. But up to Buenos Ayres or the Hornos Islands the depth of water is such that vessels drawing eighteen feet may ascend in safety by paying attention to the general directions given. It is safe and advantageous to let go the anchor anywhere the lead indicates soft bottom, and the pilots avail themselves of this very often.

The Route from Montevideo to Buenos Ayres.

Since the establishment of lightships off Point Indio and the Chico Bank, this route is easy enough. Nevertheless all foreign ships take in pilots, more especially those drawing sixteen feet four inches of water, as the channel in some places is narrow and tortuous, particularly at the S.E. extremity of the Ortiz Bank. It must be borne in mind also that these banks, which impede the navigation of the Plate, are continually shifting and altering in their forms and depths, hence they cannot be known for a certainty except by the pilots, who have to sound and ascertain the channels continually in conducting ships under their charge. Vessels drawing less than ten feet of water may cross the Ortiz Bank anywhere, coming from Montevideo to Buenos Ayres, as there is always ten feet eight inches over it. As a rule, when the lead gives a soft bottom mixed with sand, it is indicative of approaching a bank, and the harder it gets the nearer is the bank. Care should be always taken to have the anchors ready to let go at any moment. There are three channels between Montevideo and Buenos Ayres,—the North Channel, the Middle Channel, and the South Channel. The North Channel is between the northern shore of the river and the Ortiz Bank, and only vessels of fourteen to fifteen feet can navigate it. The Middle Channel, which is formed between the Ortiz and Chico Banks, is the deepest, and therefore the most frequented. The South Channel is between the southern shore and the Chico Bank, and is available to vessels of sixteen feet. To pass through the North or South Channels there should

be a steady breeze, aft or on the quarter, hence they are only used by coasters, if it can be helped.

The North Channel.

If circumstances oblige a vessel to take this channel, and supposing the starting point to be three or four miles S. of the Cerro, it should steer W.S.W. for a time, endeavoring to ascertain the run of the current. To clear the Panela Rock, which should always be passed on the starboard side, keep the light of the Cerro nothing to E. of N.E. ¼ E., until it is in line north and south with Point Espinillo, then put the helm to W.N.W. ¼ N., so as to avoid the shoals of Santa Lucia and the Barrancas de San Gregorio. Approaching Point San Gregorio, which is the extremity of the high land, much care should be taken with the soundings. If more than twenty-nine feet of water is found, it shows the vessel to be near the flat to the west of this point, and she should be put to port until the water shoals to twenty-three or twenty-five feet, then put her head to N.W. ¼ W., the Point bearing E.N.E., distant eight miles. Steering N.W. ¼ N. the water will gradually diminish to eighteen feet in front of Point Cufré, which should be passed within about two miles. When this point bears N.E., put the ship's head to W., keeping a moderate distance from shore, until the west point of Sauce is made, which is easily distinguished by the trees crowning its top. Once here, to give a good berth to the rocks called the Pipas, which are in mid-channel, and partly above water, and to pass in shore of them, the coast must be approached pretty near, until the rocks bear a point and a half or two points to port; then follow the edge of the Ortiz Bank according to soundings, until Colonia appears about W. by N., and the vessel then bears for the city. The soundings, which have been uniform at about eighteen feet, will now deepen to twenty-nine feet in the narrow channel between Point San Pedro Alcántara and the Pescadores Bank. Making Buenos Ayres whilst steering W.S.W., or somewhat more S., twenty-one feet of water will be found in the Outer Roads.

The Middle Channel.

Before establishing the lightship off Point Indio it was necessary to make out that point for certainty before attempting either the Middle Channel or the South Channel. Although the facilities which the soundings and the

nature of the bottom indicate are very great, still the land is so low hereabouts that this lightship is a great boon to those navigating the Plate, and forms an excellent starting point for both channels, either at day or night. The first thing after leaving the roads of Montevideo is to make for this lightship, steering W S.W. ½ W.; but the currents in this part of the river are such that the bearings of the Cerro should be carefully watched as long as it is in view, until the lightship be made out, and the ship's course be thus ensured. The soundings are also a good guide. Soon after leaving the roads twenty-three and a half to twenty-five feet will be found, and whilst the depth remains nearly uniform at that, it shows the channel is well kept: if it diminishes to twenty feet and less, then the vessel is falling on the verge of the Ortiz Bank; whilst on the other hand, if it deepens to twenty-nine feet, it indicates a drift towards Sanborombon Bay. In each case the currents should be carefully considered in any alteration of course. Having proceeded thirty-five miles on this course, the lightship will appear, and a vessel can bear down on her to pass on either side, or take in pilot, if one is required, as this is their station. After passing the lightship, put the ship's head to N.W., so as to pass between the New Bank and the shoals forming off the Argentine shore, meanwhile watching for the steep edges of the Ortiz Bank to the N. of the Chico. On this course the water should deepen from about twenty-five feet to twenty-nine and thirty-five feet, afterwards very gradually shoaling. This shoaling, and the hardening of the bottom with sand, indicate the proximity of the banks in the narrow part of the channel. If with this N.W. course the soundings are uniform, not exceeding twenty-three and a half feet, it shows that a strong current has set the vessel towards the Chico Bank: in that case steer N., even a little E. to it, if it is thought the bank is very near, until the lead gives twenty-nine or thirty-four feet as mid-channel: once in that water the ship's head should be put to N.W. again, as the steep edges of the Ortiz Bank have to be avoided, continuing on the same course until the next lightship on the Chico Bank is made out. This lightship is anchored in twenty-one feet of water, off the N.E. extremity of the Bank, and should be left on the port side. If from some cause or other this lightship is unavailable, or cannot be made out in thick weather, then great care should be taken with the soundings, keeping close to the edge of Ortiz, but marking well the nature of the bottom. If the vessel is in the direct channel for Buenos Ayres, and in the parallel of the Ortiz Bank with the N. extremity of the Chico Bank, then the lead will give twenty-three, twenty-nine, and thirty-five feet of water, with soft bottom, diminishing gradually as the Santiago and Lara Banks are approached, and continuing

so to shoal until the roads of Buenos Ayres are reached. The northern edges of the Chico Bank are very uneven and «lumpy,» hence care should be taken to avoid them. If thirty-nine feet or more water is found hereabouts, it shows the position to be more S. than the extreme N.E. point of the Chico Bank, and therefore necessary to move more N. in order to avoid the Bank. If, on the contrary, the water does not exceed thirty-five feet, it indicates the edge of the Ortiz Bank to the northward of its parallel with the point of the Chico Bank, and the ship is therefore to be put for the Argentine shore until mid-channel is reached. This lightship off the northern point of the Chico Bank is a great acquisition for navigating the Plate by the Middle Channel: it is anchored in twenty-five feet of water, distant thirty-four miles N. 45 deg. W. from Point Indio lightship in direct line.

The South Channel.

In entering this channel it is requisite to make out the lightship off Point Indio, which, as has been stated, is anchored in twenty-five feet of water, between the said point and the S.E. extremity of the Ortiz Bank, and forty-three miles from the port of Montevideo. If circumstances are such that this channel is preferable to the middle channel, run along the Argentine shore, keeping a soft bottom with the lead until rounding the point at Bay of Barragan. In the first part of the run the New Bank must not be forgotten; its proximity will be indicated by the shoaling of the soundings, and the mixture of sand with the soft bottom. The bearings from the lightship, however, if that be made out rightly, will insure a safe passage here. Following the southern coast of the river, and keeping with the edge of the tosca shoals which fringe it, the lead will indicate tosca and soft bottom alternatively, and nearly equal soundings. In this manner the south channel must be crept along until the church of the Magdalena bears S. 28 deg. W. On the southern extremity of the Chico Bank, as well as along its edge there are twenty-three feet of water, hard bottom; but running N.W. and S.E. there is a strip on which no more than eighteen feet of water will be found, though the bottom is soft, and it forms a narrow channel with the shore. Therefore, to be quite secure, this channel, which is near the Chico Bank, should be avoided, keeping as near shore as possible for the draught of the vessel. If Point Atalaya bears S. 40 deg. W., it is then pretty certain that the vessel is not in the channel, and should be kept off until twenty-three feet is obtained, so as to clear the Santiago and Lara Banks, and this depth should not diminish until abreast of Quilmes, the same river giving

nineteen or twenty feet in the roads of Buenos Ayres. In place of following the Argentine coast, after emerging from the south channel proper, perhaps the safest course is to steer N.W. until the Ortiz Bank is approached, and then take a course for Buenos Ayres direct. This is by far the best course if the destination be Colonia or the Hornos Isles.

Beating from Montevideo to Point Indio.

If it is necessary to tack after leaving Montevideo, care should be taken to avoid the dangers lying at the mouth of the river, such as the English Bank, the Archimedes, the Ortiz, and the shoals off the right shores of the river. The soundings and the nature of the bottom will indicate clearly the localities of the banks, and with such guidance there should be no fear to beat the distance to Point Indio.

From Point Indio to Buenos Ayres.

More difficulties present themselves, and more attention is necessary in beating from Point Indio to Buenos Ayres For a while, between these two points, unless the running is at least six knots an hour, the current should not be attempted to be stemmed, at least if it runs more than one or one and a-half knots. If the current runs strong, and the vessel does not make much way, it is better to come to anchor, and wait for a more favorable opportunity—change of wind or current. After passing the lightship the first tacks should be towards the Argentine shore, so as to clear the New Bank, at least if the draught of the vessel permits it being crossed. It is quite safe to beat here if the lightship is always kept bearing somewhat E. in the outward tacks, until a tosca bottom is felt, which shows that the N.W. point of the bank is being crossed; then the tacking may be prolonged to the Ortiz Bank up to twenty-one feet of water, returning to a similar depth in shore. It is not so uneven or broken on the edge of the Ortiz Bank as it is on the tosca ledges lying along shore, therefore even a little less water on that bow may not be dangerous, still it is better to keep the same water, so as to avoid any outlying lumps of the bank. In this manner a vessel may beat past the New Bank to the S.E. extremity of the Chico Bank When in the vicinity of the latter bank, six or eight trees in the neighborhood of Magdalena will appear, and while these bear S.W. quarter S. a vessel may beat without fear. It will be noted now that more water will be found on the starboard side, running along the edge of the Ortiz Bank, than when making shore on the port bow. When the ombú

trees referred to bear S.S.W., it shows the position to be in the channel between the Ortiz and Chico Banks: they may be seen from the round-top of an ordinary vessel before the Chico Bank is reached, but from the edge of the Ortiz, say in twenty feet of water, they cannot be seen,—a vessel must be in mid-channel, and the weather clear, before they can be made out from the mast-head. Once between the Ortiz and Chico, a vessel may beat towards the former up to twenty feet without any fear; but should not approach the latter any nearer than twenty-five feet, as its edges are very steep. When it is calculated the vessel is in the narrowest part of the middle channel, great care should be taken, the ship put about immediately if after the lead gives twenty-nine feet the next throw be two feet less. The shoaling of this bank is rather abrupt—giving twenty-three feet at first, then eighteen feet at a second cast, and the next eleven feet, with hard bottom: the rapid shoaling renders the Chico the most dangerous bank in the River Plate, and being uneven in its edges, and leaving but a narrow channel between it and the Ortiz, the working of a ship past its dangers is a difficult task. Having passed this, and tacked across the channel, the soundings will be found at thirty-nine and a-half feet, which, when shoaling to thirty-two or twenty-eight and a-half feet, shows the proximity of the Santiago and Lara Banks: still the port bow may be kept to the Argentine shore until twenty-three feet is reached, which will be nearly abreast of Quilmes: perhaps only twenty-one feet will be found, but if the bottom be soft black mud the channel is good. Once up to this point a couple more tacks will reach the outer roads of Buenos Ayres. Inside the road perhaps it will be necessary to take one or two short tacks, to bring the vessel to a good position, but not less than two feet of water should always be under the keel.

ADVICE.

After all, it must be remembered, that all such book instructions as have been given as to the routes to Buenos Ayres are mere indications for extreme cases, and for such unforeseen circumstances that no others are available—such, for instance, as the removal of either of the lightships off Point Indio or the Chico Bank, from some cause or other; or during thick weather, when no marks are visible; or if full confidence cannot be placed in the pilot on board. Otherwise, it is not advisable for any foreign captain, unless of much experience, and well knowing the landmarks, to attempt the passage to Buenos Ayres, or outward, without the assistance of a practical pilot. It should also be borne in mind that in a great estuary like

this, where the currents run in such different directions, the formation of the banks is always changing, and with them the channels; hence it becomes necessary sometimes to alter the position of the lightships, from which it will be seen that the bearings and directions given can only be approximately relied upon, as the results of the then latest surveys published. More may be confided to the soundings, and the lead should always be kept going: the depth, and nature of the bottom, with careful reference to the chart, are, moreover, the best guides the pilots have.

THE AFFLUENTS OF THE PLATE.

The requisite knowledge for navigating the Uruguay and Paraná being only attained by practical experience, the distances on these rivers only are given here:—

The Uruguay.

			Miles.
From the roads of Buenos Ayres to Point Gorda, at the entrance of the Uruguay,	....	...	55
« Point Gorda to the Rio Negro,	....	....	30
« Rio Negro to Gualeguaychu, ...	....	....	23
« Gualeguaychu to the Arroyo China,	...		10
« Arroyo China to Paysandu, ...	....	....	12
« Paysandu to Concordia,	....	....	62
« Concordia to Salto,	....	....	9
« Salto to the town of Belen,	....	....	30
« Belen to the Rio Miriñai,	....	....	48
« Miriñai to the Rio Ibicui,	....	....	60
« Ibicui to the town of La Cruz,		....	16
« La Cruz to Santo Tomé,	....	....	48
« Santo Tomé to the Pass of Concepcion,		....	66
« Concepcion Pass to San Javier,		....	21
« San Javier to Salto Grande, 4 miles below Pepiri,			121

The Paraná.

The distances of the various ports of call on this river from the roads of Buenos Ayres are as follows:—

		Miles.			Miles.
To the Paraná Guazu,	....	55	To Esquina,	....	456
« San Pedro,	....	145	« Bella Vista,	....	572
« San Nicolas,	....	181	« Corrientes,	....	612
« Rosario, ...	....	223	« Salto de Apipe,	....	780
« Paraná, ...	....	321	« Salto de Guairá,	....	1,070
« La Paz, ...	....	406			

THE RURAL CODE

OF THE

PROVINCE OF BUENOS AYRES.

(Province) - Congress.

TRANSLATED BY SPECIAL ORDER OF GOVERNMENT

BY

M. G. & E. T. Mulhall.

Editors of the STANDARD.

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BUENOS AYRES.

1866.

Dedication.

To His Excellency Don Mariano Saavedra, Governor of the Province of Buenos Ayres.

This work, is by special permission, dedicated by His Excellency's most obedient humble servants,

THE [illegible].

Buenos Ayres, April 14th 1866.

PREFACE.

Among the many evidences of progress which surround us in this favored ›ountry, none is perhaps of more lasting importance than the present Codigo Rural. The want of some such guide for administration of the laws in the ›ural districts had been long felt, and soon after the election of Governor Saavedra, His Excellency encharged the distinguished legislator Don Valentin Alsina with this arduous task. Two years were occupied in its compilation, luring which Dr. Alsina availed himself of the advice and suggestions of the eading Argentine and foreign estancieros. Exceptions have been taken to some rticles of minor note, but on the whole it has been received as an inestimable ›oon to the landed interests, esp.cially by the foreign settlers, of whom the ›reat bulk are Irishmen, and we cannot allow this occasion to pass without dding our feeble testimony to the shining talents of Dr. Alsina and the great ervice which he has rendered his country. Numbers of our farming friends ›ave repeatedly called for a translation of the Codigo into English, and the Government has liberally granted a subvention for this purpose: the present English edition will therefore form the complement of a great and good work hich will remain a lasting monument of Governor Saavedra's administration, and s utility is so obvious that we feel assured every sheep-farmer will regard it as vade-mecum.

We have religiously followed the text in every instance, without attending › elegance of diction, and even preserved the Anglo-Spanish terms in use in ›e Campagna as being more easily understood than the correct English ›nonyms. At the end will be found a Glossary, explaining these terms for ›e benefit of those whom it may concern.

Decree.

MINISTRY OF GOVERNMENT.

Buenos Ayres, December 3rd 1862.

WHEREAS the important interests of the Campagna urgently call for t creation of a Rural Code which will more fully and clearly define the rights a respective obligations of all, and remedy the abuses and difficulties whi impede advancement—and whereas Dr. Valentin Alsina possesses the nec sary erudition, diligence, and aptitude in every sense to execute so importa work.

The Government hereby appoints him to compile such a Code, with remuneration of Six thousand $ m|c per month during the time he may emp therein, such sum to be set down among the casual expenses of the Go ernment.

Let this be communicated, published, and entered in the Official Regis

SAAVEDRA.
MARIANO ACOSTA.

Reply of Dr. Alsina.

Buenos Ayres, December 6th 1862.

To the Minister of Government Dr. Mariano Acosta.

I have received the note, dated yesterday, communicating the decre the 3rd instant whereby I am named to compile a Rural Code, and to whi Mr. Minister you are pleased to add a flattering expression (for which I duly grateful), that the Government trusts I will undertake this new la especially as I was the originator of the idea.

In spite of the difficulty of the task and my sense of my imperfect fi for its fulfilment, I accept the charge, since I have been for some years b convinced of the absolute necessity of our Campagna having such a Code a indicated, and at various periods I labored in this sense, but I must pre that my present state of health and manifold occupations will only permit to devote myself to the work at intervals.

This circumstance forces me respectfully to decline the remuneration

6,000$ per month during its compilation, which I could only consider I had fairly earned by giving it all my time uninterruptedly, which I have said is impossible, nor could I accept pay for such time as I was doing nothing.

Permit me, rather, to indicate as more convenient and less onerous to the State, to wait till I shall have concluded the task, and then award whatever compensation may be deemed suitable, on the understanding that be it much or little I shall never make any difficulty in the matter.

I have to beg you, Mr. Minister, in conveying my reply to the Governor, to add also the expression of my gratitude for the honor done me in confiding to me this charge, for the better fulfilment of which I will try to lend my entire good-will, and this is all I can offer.

May God preserve you many years.

Valentin Alsina.

Amended decree.

Government-house, December 9th 1862.

On consideration of Dr. Alsina's motives of delicacy in declining the monthly remuneration expressed in decree of the 3rd instant, and in order that this may not be an obstacle to the formation of the Code, the Government hereby admits such modification, reserving to itself the award in due time of a suitable remuneration for the important work entrusted to him, and therefore suppressing the clause alluded to.

Let this be communicated and published.

SAAVEDRA.

MARIANO ACOSTA.

Completion of the Code.

DR. ALSINA'S REPORT.

Belgrano, April 8th 1865.

To the Minister of Government Dr. Pablo Cardenas.

I have the honor, Mr. Minister, to submit to you the project of Rural Code herewith I was entrusted, and to beg you will present it to His Excellency the Governor.

There has been a great delay in my concluding finally this business, but this is easily explained when I review in a few words all the antecedents.

For some years back this subject had somewhat occupied my attention, and when acting as Minister of Government, in March 1856, I took occasion, with leave of the Governor, Dr. Obligado, to address myself to the Comision de Hacendados then existing, soliciting their opinion on many points and questions, the clear definition of which, I judged, might be made the basis of a Rural Code.

Although I shortly after resigned office, the Comision, furthering my idea with zeal and patriotism, addressed itself in turn to a number of estancieros and agriculturists, requesting the opinion of each, individually, on the points I referred to, and almost all the persons so consulted sent their reply in due time, but here the matter remained paralyzed.

Again when I held the post of Governor, in 1857, I devoted myself, as soon as more pressing cares permitted, to revive the defunct Comision de Hacendados, and renew the subject. The Comision took it up with equal or even greater zeal than before, and forwarded me all the replies and information it had collected in 1856. I intended then to give all my attention to the business to study it in its various bearings and make up a Project of Code to be laid before the Legislature, but unfortunately the political events and changes of the time successively impeded this lengthened task until the conclusion of my administration, in the close of 1859.

Some years later, at the end of 1862, the present Government being mindful of this important matter thought fit to revive the idea and encharge me with the compilation of the Code. I fully foresaw certain difficulties, which had not before existed but sprung up from the new order of things: however my patriotism was appealed to in favor of a work for which, moreover, I felt a decided inclination, and I at once accepted.

I then began, by means of the press, calling upon all practical men who had experience in the requirements of the Campagna, to lend me their aid and co operation. I again published my circular of 1856, and had the satisfaction of receiving directly in 1863 many valuable informations from sheep-farmers or agriculturists, some of whom had also replied in this manner in 1856. All these gentlemen lent me, certainly, a very decided assistance, and I, therefore deem it right to record their names as follows:

Reports in 1856.

Cattle-farms.

Don Julian Lynch, John Hannah, Bernardo Gutierrez, Maximo de Elia Manuel Villarino, Lino Lagos, Manuel Lopez, Patricio Lynch, Faustino Alsina Norberto Villegas, Mariano Benitez, Venancio Casalins, Matias Ramos Mejia, John T. Farran, Francisco Halbach, Evaristo Alfaro, Jose J. Benitez, Ignacio F. Correas, Juan Dillon, Valentin F. Blanco, Leonardo Brid, Josuah Thwaites, Manuel Jose Guerrico, Isaias de Elia, Manuel J. Cobo, Felipe Vela, Gervasio Rosas, Eugenio Roballos, Plowes Atkinson & Co., Jose M. Suarez, Damaso Bellido, Francisco Suarez, Pedro Pablo Ponce, Ildefonso Arranze, Agustin E. Vela, Tomas J. Acevedo, Jose Ignacio Gomez, Francisco Moreno, Jose F. Irasla, Mariano Miró, J. Nepomuceno Moreno, Jose Martinez de Hoz, Thomas Gibson, Pedro J. Martinez, Juan Lanus, Jose Martinez, Norberto A. Martinez.

Tillage.

Don Manuel Villarino, Lino Lagos, Bernardo Gutierrez, Norberto Villegas, Antonio Bermejo, Carlos y Miguel Naon, Jose F. Benitez, Juan Dillon, Manuel Lopez, Josuah Thwaites, Maximo Benitez, Leonardo Brid.

General notes on Cattle and tillage.

Don Manuel Villarino, John Hannah, Bernardo Gutierrez, Maximo Elia, Leonardo Brid. Patricio Lynch, Antonio Bermejo, Venancio Casalins, Matias Ramos, John F. Farran, Valentin F. Blanco, Ignacio Correas, Evaristo Alfaro, Manuel Lopez, Juan Dillon, Agustin Sousa, Josuah Thwaites, Julian Lynch, Mariano Benitez, Lino Lagos, Mariano Gainza.

Reports in 1862.

Doctor Gibbings, Gregorio G. Quirno, John Cornell, Eulogio Payan, Felipe Senillosa, Jose N. Castaño, Ferdinand A. Pearson.

You will find, Mr. Minister, all these reports in the large appendix accompanying my circular of 1856 under the heading "Antecedents and bases for the Rural Code." In casting your eye over them, you will at once perceive the numerous and striking variety of opinions on almost every point in question. I have chosen these which seemed to me most practical and adequate, and in some cases rejected all, preferring my own instead I have also followed my

own view in such matters as no reply has been sent in, and again touching points which have not been canvassed in this manner for the opinion of others.

The press has, from time to time, published 'Comunicados' containing subjects well worthy of attention. Of all that came within my reach I profited, by extracting whatever was most available. In this category may be included Mr. Daniel Maxwell's admirable Tables of Statistics.

At the same time I diligently collected the various multiform decrees bearing on the subject, which had been passed in Buenos Aires during the last 43 years and were scattered over the *Rejistro Oficial* since 1821. In this immense medley of decrees, laws, resolutions &c. I found much that is useful and applicable, and availed myself of the bulk of same.

In like manner since 1863 I applied to Don Mariano Balcarce for certain decrees, works, and pamphlets published in Europe which had more or less connection with the business in hand, and I am happy to acquaint the Government that I met with the fullest and kindest co-operation from that distinguished Argentine citizen. He sent me even more than I asked for, and from all which I have likewise extracted. Unfortunately I have been able to profit only of a small portion, for I have come to the conclusion that as far as regards our Campagna there is an immense difference between it and the rural departments of European countries, not only in the public administration, but in the system of labor, the kind of industry, and even moral condition of the inhabitants.

As soon as I had obtained all this mass of information and had various private consultations, I found myself in a position to lay down a fixed plan, to begin the composition of the Code, notwithstanding the absence of any model or precedent to follow.

But here I was suddenly stopped short by a difficulty of a new kind, which could be overcome neither by patience nor study. I must speak frankly on this point. I refer, Mr. Minister, to the present administrative order of affairs.

On perusing the Code, you will perceive that the intervention of the General Department of Police in many acts and measures connected with the Campagna is wholly inevitable: I have, nevertheless, endeavored to reduce and limit it as far as possible, the more so as at present that Department (improperly styled General) is provisionally an office of the National administration and nowise dependent on the Provincial Government. I am well aware that it is always ready, and lends itself with good-will, to carry out any orders of the Provincial Government, but this I hardly consider enough. A Government

must never rule by implied co-operation, but order, decree and execute in all matters within its sphere of action. But Your Excellency at present cannot issue any real order to the Chief of Police, or punish his subalterns for improper or tardy performance of such orders; nor yet can you remove his agents for breach of duty. The Chief of Police, in his turn, is also fettered, for he cannot positively command any of the camp Commissaries (who are the Justices of Peace) appointed by the Provincial Government and depending directly thereon. Such an anomalous, irregular, and prejudicial order of things does not, certainly, exist in any other country.

And still, Mr. Minister, this was not the greatest obstacle in my way: it was the actual administration (or rather want of administration) so much felt in our Campagna. The Municipal authority (which does not yet exist in all the partidos) is often inefficient, and sometimes a dead-letter, either by unlucky dissensions among the members, or by their sluggishness which not unfrequently leads them to leave everything to their president, the Justice of Peace. This functionary, then, has to discharge municipal as well as judicial duties, to act as Police commissary, to execute many and various orders from the Ministers, the Chief of Police, and all the courts and tribunals. This monstrous institution (it is not the first time I have called it so) demands a sweeping reform so as to distribute and mark out among different officials the fulfilment of such numerous and manifold attributes and obligations.

But until this be done, how can we still further multiply, as the Code indispensably requires, the attributes and duties of Justices of Peace who, moreover, lend their services gratuitously? To suppose that we can find 50 men willing and able to carry out with perseverance and exactness this tremendous burden which will leave them not a moment of repose but involve them in perpetual broils and responsibilities, and force them to neglect their personal occupations, would be to invert the unerring laws of nature. And of what use are the wisest ordinances of any code, if we have not the requisite magistrates for their execution and fulfilment? It must at length fall into disuse and oblivion, as has already too often happened with measures essentially suitable.

These reflections, which I now briefly call to mind, so discouraged me that I almost gave up the idea of undertaking so long and tedious a work which in the end might result useless, or at least led me to suggest to Government that it should be postponed until proper measures were taken to improve or alter the internal 'regimen' of the Province of Buenos Ayres. On the other hand the Governor's anxiety to have the work concluded under his term of office got the better of all my repugnance, and I now submit the Code with the hope, and on

the understanding, that for its better and more complete fulfilment the Government will dictate or bring forward such measures and laws as are urgently called for by the necessities of the Province.

In order to make myself more easily understood by the majority of the rural population I have preserved old terms, especially those of measurement, but this will not prevent at a future time the adoption of the new metrical system instead.

I have re-modelled the present project of Code three several times. I originally began it on very extended bases, but finally reduced it to its actual dimensions, suppressing much that might be usefully comprehended, for I considered that in establishing a new order of things it would be well to avoid any confusion that might arise from a multiplicity of new edicts. It seemed to me better to leave till afterwards the gradual addition to, and improvement on, the Code.

I must confine myself to these general principles; for, besides being ready at any moment to give verbal explanations and details on any point judged necessary, it would be an endless task if I were to give in full the motives for every clause and article expressed in the Code; and, moreover, if you have time *Mr. Minister*, to look over the above-mentioned bundle of *Antecedents and Bases*, you will find therein the various reasons and arguments touching same. On this head I will observe that among the many prescriptions which are not found referred to in said bundle, having been taken from the Registro Oficial or other sources, or added by myself, those contained in Chapter V. merit special attention from Government, their purpose being not only to leave ample room for future alterations and additions to the Code, but also to prevent the lapse of years causing these new edicts to become scattered, forgotten and effete. In the long interval of 43 years, from 1821 to 1863 very many useful and salutary measures have been passed, but they got scattered over 25 or 30 volumes of the Registro Oficial and mixed up with thousands of others on a variety of subjects. They consequently became a dead-letter. I have therefore thought fit to provide for the successive or periodical collection, in the form of Appendices to this Code, of all that may be hereafter decreed on the subject. In this manner the sheep-farmer, agriculturist, and all others to whom this Code may refer, will find in one little volume whatever concerns them, and can no longer have the excuse (now so justly alleged) of ignorance of the laws.

There is another point which has also offered me no trifling difficulty. Many of the farmers and agriculturists in their reports propose the adoption of

such-and-such a measure, which would be no doubt highly beneficial, but I had to study whether it was conformable with strict general principles, and above all with the Constitution of the country. I have found that many such proposals were not; and for this reason I neither could nor ought to include them in the Code as binding and forcible, but I felt myself authorized to adopt some of them as voluntary suggestions, leaving it to the good judgment and experience of the magistrates to act by them. This will be especially seen in the 1st section of Chapter V.

My work would have been much easier if the Province possessed modern Codes in civil and criminal proceedings, as in many instances I could then have referred to their prescriptions. Such not being the case, I have been forced to make tedious repetitions, since I could not follow any well-defined regulations. For the rest, I have limited the penalties in rural matters to fine, imprisonment, or public-works within the partido, without including accessory modes of punishment. I have sought to establish a summary jurisdiction, and for this purpose refused appeal in all minor causes; but allowed it to the court of 1st Instance in all grave matters, or those of a mixed nature, as for example when a rural offence is involved in, or followed by, a breach of common law.

It will be easily understood that nearly three-fourths of the ordinances of this Code, as being mere regulations, come within the ordinary faculties of the Executive, which can at any time make alterations or additions at will. There are, however, some dispositions which cannot be set down in this category, but indispensably require the sanction of the Legislature, and as all are so closely bound together I think the Government had better submit the whole project of Code to the Chambers.

Before concluding I may be permitted to remark that from all the enquiries I have made, I come to find that no nation on the earth at present possesses a genuine Rural Code, although in all countries there are scattered laws on the subject, and frequent efforts have been made in many places to this end. Neither France, Spain, Russia, Belgium, nor even the United States can boast a Rural Code. Such has been the difficulty to compile one! France which stands foremost in these things and speedily made codes for the various branches of legislation, is, in my opinion, the nearest to the mark, but has not fully attained the purpose: what they term their Code Rural is only an extensive law dictated by the Convention of 1793, but far from being general in its nature or constituting a real Code. Afterwards, under the 1st Empire and 4 subsequent monarchies, many laws and partial projects have been put in force, most of which are within my reach; and many admirable works have also been written,

but still they have not succeeded in making up a Code. As for Spanish America, I believe in no part has any attempt yet been made in this sense.

Hence, although the Code I now present contains many defects, since provides an easy method for its own improvement and may also be adopted by many of the other Argentine Provinces, merely making such changes as are their peculiar industries, I feel convinced that if the present Government of the Province of Buenos Ayres succeeds in putting it in practice, it will be the first Government to render so great a service to our beloved country, and will moreover, earn a special title to the esteem of all parties, which is my sincere wish.

I have the honor to offer you, Mr. Minister, my most respectful compliments.

Valentin Alsina.

Reply of the Minister.

Buenos Ayres, April 9th 1866.

To Doctor Valentin Alsina, Senator to Congress.

I have received and transmitted to the Governor the project of Rural Code which you were commissioned to draw up, and the notes accompanying it under the title of "Antecedents and Bases for the project of Rural Code."

As you very justly observe, it suffices to cast a rapid glance over the report and Project of Code to perceive the variety of opinions on all points in question, and the corresponding magnitude of the undertaking which you have brought to a conclusion in a manner so highly satisfactory.

The mere selection of what was best among these informations, and blending of them with our existing laws, many of which had fallen into abeyance, while also adapting the same to the principles of foreign legislation and of our domestic institutions, was an arduous task that none but a methodic and enlightened genius could conceive and execute. And when we add to all this the peculiar difficulty, arising from our present mode of administration, in drawing up a Code, regulating its dispositions with a deficiency of agents to enforce the observance of same, one can understand the discouragement you must have felt, which could only be overcome by your firm resolve to carry out the idea you had so long cherished, at the same time yielding to the laudable wishes of the Governor to see the work finished during his term of office, and this will be an additional title to the compiler for public gratitude.

For this reason, the Governor, whose ardent wish is now realized, and who appreciates the noble motive that guided you in this memorable work, desires me in reply to postpone any mention of the recompense you have so worthily earned, and to limit myself to a public expression of gratitude on the part of the Government and, in its name, of the entire Province, for the inestimable services which the Rural Code is calculated to render to the country.

Henceforward the want so much felt in the Campagna will be supplied, and the Government is happy to be able, in its next Message, when remitting the project of Rural Code to the Chambers for the Legislative sanction, to shew that a system of Codes, analogous to the consolidation of a country, is already commenced; that the first to enjoy these benefic fruits is the Campagna, as the part most requiring the paternal attention of Government; and that Dr. Valentin Alsina is the distinguished citizen who has again on this occasion brought all his learning and application to the fulfilment of the great work.

I salute you with the most profound respect and esteem.

PABLO CARDENAS.

Message of the Chambers.

Buenos Ayres, May 12th 1865.

THE EXECUTIVE—

To the Honorable General Legislative Assembly.

The Government submits for the enlightened deliberation of the Chambers the annexed project of Rural Code for the Province of Buenos Ayres. As it has been compiled at the express direction of the present Government, the Executive entertains a laudable ambition that it should be definitively sanctioned during the actual term of administration.

The state of war on which the country is now entering, far from being an obstacle, is a motive to assert emphatically that our institutions are deep-rooted in the Province, and that no one pretends to check the impulse of our progress and advancement, of which we shall have an eloquent proof in the sanction of the Rural Code by the present Legislative Session.

In the examination which your Honorable Chambers may think fit to institute of this important work, the Executive will aid you with care and attention. At present it will merely draw your notice in a few words to the excellent method of its compilation, and especially to its conciseness.

It has been rightly comprehended that we must begin by defining reciprocal duties in a matter hitherto neglected by legislators, to avoid the natural confusion likely to flow from a sudden transition from the absence of adequate laws to a superabundance of regulations. It will remain for the necessities of future periods to enlarge progressively on this digest of laws.

But this conciseness, far from causing obscurity, has been so admirably harmonized with a clearness of expression that we may rest assured the simple reading of it will place it within the understanding of all, as properly corresponds to a Code chiefly destined for the Campagna.

Another fact worthy of attention is the care displayed in combining the present customs of the Province with the principles laid down in such matters by the most civilized nations of the age, in order to make up a uniform digest which will neither alter our present mode of being, nor prevent necessary and useful reforms, and this will be most apparent to your Hon. Chambers in all that relates to the functionaries encharged with the execution of the Code in its various prescriptions, for the compiler has adapted himself to the authorities at present existing, in order to prevent any obstacle to its sanction by reason of the inconvenience that would result to the Campagna from a total change of the system of magistrates.

In a word, the note and Antecedents remitted by the distinguished author, Dr. Valentin Alsina, and hereinafter annexed, most clearly demonstrate the acknowledged value of this important labor, and the Government, therefore, does not doubt of its sanction by the Hon. Chambers.

May God preserve your Hon. Chambers many years.

MARIANO SAAVEDRA.

PABLO CARDENAS.

Sanction by the Legislature.

Buenos Ayres, November 3rd 1866.

The President of the Senate

To the Executive.

The undersigned has the honor to hand Your Excellency a legalized copy of the Rural Code definitively sanctioned by the Chamber of Senators, in Session of the 31st ultimo.

May God preserve Your Excellency many years.

Emilio Castro.
Ramon de Udaeta.
Secretary.

DECREE.

November 6th, 1866.

Let the above be executed, acknowledged, communicated, published, and inserted in the Official Register.

SAAVEDRA.
Pablo Carcheras.

The Senate and Chamber of Deputies of the Province of Buenos Aires have sanctioned with force of law the following

RURAL CODE.

GENERAL DEFINITIONS.

Art. 1. Rural Code is the collection of decrees relative to persons and properties of the Rural districts.

Art 2. A rural person is the owner, tenant, possessor, or manager of an establishment in the camp, residing there habitually, and also the servants or employees of same.

Art. 3. Rural property comprises landed-estate, furniture or chattels belonging to estancias, chacaras, quintas, or camp-towns, or to special industries or establishments.

Art. 4. An estancia is an establishment solely or chiefly for the purpose of raising stock, such as horned-cattle, horses or sheep. A chacara or quinta is an establishment, solely or chiefly, for sowing and cultivating any kind of grain, vegetables, plants or trees. Special industries or establishments comprise such as dairies, cabañas for refining breeds, mills, places for rearing pigeons, bees, or rabbits &c. in the camp.

Art. 5. Rural Legislation defines and lays down—the rights and privileges pertaining to rural persons and rural estate—the duties and obligations affecting same in favor of a third party or of the general welfare—the ordinances particularly referring to estancias or to chacras, as well as those common to both—and the decrees concerning camp administration in general.

CHAPTER 1st.

CATTLE-FARMING.

Section 1st.

General Regulations.

Art. 6. The superficial extent of an estancia, as also the number of animals thereon, are entirely matters of liberty: but the owners of same must be ubject to the special regulations contained in this Code.

Art. 7. Every estanciero is hereby obliged to have his land surveyed and arked with limits (mojones) within five years from the promulgation of this ode; and whoever, after that term, may in any manner become possessed of a iece of land although previously part of an estancia so marked out, shall, within ro years after becoming so possessed of same, cause said portion to be marked st, placing the mojones at a distance of at least a quarter of a league apart.

Art. 8. Whoever fails in the fulfilment of any of the clauses in the preding article shall be subject to a municipal fine of 300$ per league, per month, uring such default.

Art. 9. It is hereby prohibited to trespass on a neighbor's land, whether collect cattle or even gallop over it, or to hunt ostriches, deer or other animals ithout previous permission from the owner of the land, under a penalty of 100$ 500$ to be imposed by the Justice of Peace in favor of the owner should he licit same; in case of non-payment of the fine the trespasser shall be sentenced the Justice of Peace to public works for a term not exceeding 3 months. he sentence in those cases not to admit of appeal.

Art. 10. Whoever may have his dwelling-house near his neighbor's land all let out his cattle in such manner as to keep them on his own land and not spass on his neighbor's.

Art. 11. When a farmer finds troops or points of strange cattle on his land shall call in the nearest authority to certify the fact, whereupon he shall ocoed to shut them in, giving immediate notice to the owner of same to pay 4 ls a head for sheep and 2$ a head for horses or horned cattle, said authority ing care to enforce this fine.

Art. 12. If the owner of the animals refuse to pay the fine before the tice of Peace, the latter shall proceed to sell by auction a sufficient number to er the amount of fine and any legal expenses, handing back the surplus, if , to the owner of the animals.

Art. 13. The provisions of the two preceding articles are without prejudice to such case as when the animals may have caused damage to fences, trees, or the like, when the owner of the land may take such other legal proceedings as he may deem fit.

Art. 14. The auction of any kind of animals must always be on the express condition of such animals being immediately slaughtered and skinned, as otherwise the former owner may afterwards claim them wherever he find them. In this case the Justice of Peace shall require the owner of the animals to give the contra marca; and if he refuse, the Justice shall cause to be skinned a sufficient number of animals to cover the amount of said fine with cases, the auction previously made remaining null and without effect.

Art. 15. In cases of great droughts, or inundations, camp-fires, unavoidable necessities (fuerza mayor), or such as constitute a public calamity, causing an inevitable scattering or mixture of flocks and herds, the estancieros is not responsible for damage so done to his neighbor's lands, houses or quintas: except when it can be proved that he purposely drove his cattle into his neighbor's land.

Art. 16. Any calf or colt unmarked (orejano) that, in the parting of cattle or the like, may follow a cow or mare marked, shall belong to the owner of the latter: if it follow none, it belongs to the owner of the land.

Section 2nd.

Marks, counter-marks and Señales.

Art. 17. The mark indicates, and is always held as conclusive evidence of, the ownership of the animal or article bearing same.

Art. 18. Every owner of large live stock, such as horned cattle, horses &c. may use one or more marks to brand the same, in the same partido.

Art. 19. No one is obliged to renew marks or señales, already registered in the General Department of Policia: but all vouchers, certificates or transfers of same as also the 'boletos' of marks registered for the first time must be drawn up on stamped paper of the value fixed by law.

Art. 20. Besides the above-mentioned register, each Municipality or Juzgado shall keep a special archive with book of reference containing the names of owners their respective 'cuartels', and the various marks and señales existing in the partido, adding on the new ones or such as may come from other partidos by purchase, inheritance &c., for which purpose the interested parties

shall present their 'boleto' of registry in the Policia. In default hereof, said marks shall have no value or legal force in the partido, nor shall any passport (guia) be given for animals or hides with such marks.

Art. 21. The Municipality or Juzgado shall give the interested party gratis a certificate on common paper of the registry of such mark and señal.

Art. 22. In two years after the publication of this Code, the counter-mark shall thenceforward be no longer placed indiscriminately on any part of the animal but exactly beside the mark.

Art. 23. In large live stock the señal will be of the same effect as the mark, and in case of indistinctness or confusion in the latter, the former will serve to clear up any doubt or question that may arise as to the ownership of the animal, but in no case will the señal alone suffice to vindicate the right of property.

Art. 24. Within a radius of 6 leagues there cannot be two señales the same; and if such should occur, the more recent must be changed.

Art. 25. It is prohibited to cut off both ears as a señal, under penalty of $50 a head, besides such criminal suit as the injured party may choose to enter.

Section 3rd.

On Parting herds.

Art. 26. The farmer is bound to give a 'rodeo' at any time, except when most of his cattle may be dropping young, or in seasons of drought, or scarcity of funds, or other unavoidable difficulty (fuerza mayor).

Art. 27. Every estanciero may, in person or by means of a party duly authorised by him, demand a rodeo, either to see if there be animals of his mark or to separate those which he may know to be there; but he must present the owner of the rodeo his document with the mark on the margin, and the signature at foot of the nearest authority: otherwise it will be lawful to refuse a parting.

Art. 28. Every proprietor, mayordomo, capatas or manager of an establishment or puesto, on being required to give a rodeo, is rigorously bound to do so, either at once or on a given immediate day. If he refuse or delay to do so, the Justice of Peace or nearest authority shall have power, being so requested, not only to give the rodeo demanded, but also to order the party so refusing or delaying on futile pretexts, to pay the wages of the persons employed for such parting.

Art. 29. On the appointed day the rodeo or rodeos shall be gathered up, and the examination and parting performed by the person requiring same, and his peons.

Art. 30. The rodeo cannot be kept standing for over 6 hours, and no one can be obliged to give a rodeo after the hour of noon.

Art. 31. If, while one parting is going on, others should arrive to demand the same, only two of them can work on the same rodeo, beginning with those who may have come from another partido.

Art. 32. When any doubt or dispute should arise between the person parting and the owner of the establishment, respecting the property of one or more animals, the nearest authority shall decide the same as evidence may appear, without preventing the continuation of the parting.

Art. 33. Nobody can establish rodeos of unmarked (orejano) calves, under penalty of $20 per head.

Section 4th.

Mares.

Art. 34. Whoever should lose mares will notify the number and mark of same to the Justice of Peace, and the latter to the Justices of the neighboring 'partidos', to take due measures for their recovery.

Art. 35. Every estanciero may gather up any mares on his camp, giving 8 days previous notice to his neighbors, that they may pick out such as belong to them; and he may require the Justice of Peace to send an Alcalde for those that remain unclaimed.

Art. 36. The parting out of mares may take 10 to 15 days, and the estanciero is entitled to demand for his expenses up to 10$ per head.

Art. 37. As soon as the Alcalde or teniente has handed over stray mares to the Justice of Peace, the latter shall cause notices, with the mark in the margin, to be posted up in all public places, notifying the owners to claim their property within 30 days. At the expiration of this term he shall sell by auction whatever animals remain, on the express condition that they are to be killed, deducting the charge of 10$ per head for the estanciero in the first instance. The Justice shall then, through the Policia, publish in the city newspapers the name of the owner or owners of such cattle, as also in a notice on the doors of the church and Juzgado, depositing the balance in the Provincial Bank that the

owner may claim it within 11 months, after which if unclaimed it shall be applied towards Municipal expenses, without further demand.

Art. 38. But if there be no purchasers within the 'partido', the Justice shall send the animals to be sold at the Tabladas, disposing of the nett product as mentioned in last article.

Art. 39. Any estanciero finding in his camp stray mares or 'manadas' belonging to persons he knows, may notify the same to send for them within 8 days, paying him 5$ a head; in default thereof he may then demand 20$ a head.

Section 5th.

Right of way for animals.

Art. 40. The owner, tenant, or occupier of unfenced camp cannot prevent or oppose, under penalty of damages, the letting loose of cattle en route, to halt or rest on his camp, whether they belong to bullock-carts or flocks or herds of any descriptions, provided in the case of bullock-carts they do not remain over 3 days, and flocks and herds not over 12 hours, always under the following express conditions.

1st. The 'tropero' or driver of the animals must whenever possible, and except in case of a storm or other eventuality, follow the high-roads.

2nd. He must be careful to keep his cattle feeding during the whole time of his stay, especially at night.

3rd. Before halting he must notify the owner or person in charge of the estancia or puestos, in order that the latter may if necessary indicate an exact spot for him to halt, and watch whether he drive or kill any of his (the estanciero's) cattle.

4th. In case of an unavoidable scattering of the animals in which the driver has not been guilty of neglect he may be obliged to gallop over the land to collect them, and in this case he is not bound to pay any indemnity; but if the scattered animals get mixed with the estanciero's cattle he must stop short and notify the estanciero to give him a 'rodeo.'

Art. 41. Whoever violates any of the above regulations will incur a fine of 500 to 2,000$, one half to be given to the occupier of the land, the other to the local Municipality.

Art. 42. If the owner, tenant, or occupier of the land should insist upon remuneration for cattle halting in this manner, he will be entitled to charge 100 an hour for every hundred head of large cattle, and 500 for every thousand of small cattle.

Section 6th.

Collectors of produce.

Art. 43. Every collector or buyer of any kind of produce, whether a camp man, pulpero, merchandise, or clerk of a house in the city, sent for the purpose, must carry a book in which he will note down the day and date, the articles or goods bought, and the name and residence of the seller.

Art. 44. He must also note down whatever invoice of goods or produce he may send in, with the date and destination.

Art. 45. This book must be always at the disposal of the local authority, so as to inspect the same whenever for any reason it may be thought necessary.

Art. 46. The non-fulfilment of any of those regulations will be a presumption of fraud and authorize the local authority to make a summary investigation in the matter; as also to embargo, if not too late, the produce in question, proceeding at once to wind up the case if it be of trifling importance.

Art. 47. If it be a matter of some gravity it shall be sent before the respective Juzgado de 1.ª Instancia, along with the collector and his accomplices (if any), the goods in question remaining embargoed until the decision of that tribunal.

Section 7th.

Marking cattle.

Art. 48. When a farmer wishes to mark his cows, mares &c., he must send round word to his neighbors six days before-hand so as to give them time to come and pick out any animals that may belong to them. He must also request the Justice of Peace to send an Alcalde to assist at the operation; but, if such Alcalde do not attend, the farmer is not obliged to suspend the mark-

, The Justice of Peace must, furthermore, send notice to the Justices of the rounding districts that the latter may duly notify the respective neighbors.

Art. 49. The Municipality, or in its absence the Justice of Peace, shall pose on the farmer omitting to give notice as above, a fine of as many dollars there are head of cattle on the rodeo.

Art. 50. The owner of the mark, during the term expressed in such no-e, shall keep his rodeos standing for 6 hours as laid down in Art. 30, under penalty expressed in Art. 28.

Art 51. On the day of marking, before anything else is taken in hand, the calde shall make an inventory of the horned cattle and mares belonging to rties unknown, and the Policia shall publish same in the city journals for one nth, besides posting it up on the church-door and Juzgado, that the owners ay claim their property on payment of expenses incurred.

Art. 52. The above article, however, will not prevent the farmer from de-nding that such horned cattle and mares be removed from his camp, whereupon e alcalde shall part them out with peons provided by the Municipality, or in absence by the Justice of Peace, and then dispose of them as laid down in rt. 37.

Art. 53. When once the marking has begun, the estanciero is not bound give a rodeo to anyone till it is over.

Art. 54. If an estanciero by mistake mark or señal strange cattle, he shall ve the counter-mark; but if it be proved that he did it knowingly, besides ving the counter-mark he shall pay the owner double the value of the animals question, besides being amenable to a criminal process.

Art. 55. In cases of great drought, epidemic or public calamity, the Gov-nment may prohibit marking and adopt such other discretional measures, hether general or local, as it may deem fit.

Section 8th.

Pastoreos.

Art. 56. It is prohibited to have a herd of unmarked calves exclusively, nder penalty of $00 for each calf, to be imposed by the Municipality or in its bsence the Justice of Peace, who shall also oblige the holder to let loose the alves to their rodeo.

Art. 57. It is also prohibited to have a herd of marked calves within t months from their date of marking, under the same penalty as above; a whoever infringes this rule shall be obliged to keep his calves with the re for two months, before putting them out in a new herd.

Art. 58. When a farmer wishes to form a herd of horned cattle, eit from some recently purchased, or picked out of his own rodeos, or from p ings in which the number of calves exceeds the average maximum of a herd, shall notify the Justice of Peace, and the latter will appoint an Alcalde and t neighbors to inspect the cattle and furnish a written report which shall then kept in the Juzgado.

Art 59. Any farmer may, without any manner of responsibility, requ the Justice of Peace to appoint three neighbors to examine any herd in the P tido, such neighbors to be drawn by lot, who shall, thereupon, hand in a writ report to serve as the legal basis of the Justice's decision.

Art. 60. Should any of the neighbors so drawn by lot be absent or oth wise prevented from acting, other names shall be drawn in their stead.

Art· 61. The drawing shall take place in presence of the party calling f same and two members of the Municipality, or in default of these, two neig boring estancieros.

Art. 62. This service so required of estancieros is declared a public ob gation, and whoever refuses to fulfil it shall incur a fine of $5,000.

Art. 63. The Justice of Peace shall proceed in his official capacity wh there are grave suspicions of a herd comprising ill-gotten cattle; under pen of being stripped of his office.

Art. 64. For every head of cattle unlawfully contained in the rodeo, t owner of the herd shall pay 1,000$.

Art. 65. Herds of mares, are understood to be also included in all t above regulations.

Section 9th.

Señales or Sheep-marks.

Art. 66. No sheep-farmer is bound to brand his sheep, but there must a señal for every flock; and in this the farmer may make slight variations in ord to indicate the various degrees of fineness in the breeds.

Art. 67. What is laid down in Art. 25, respecting horned cattle, is also applicable to sheep, it being strictly forbidden to use for señal an ear cut off, 'punta de lanza' and 'orquetas a la raiz' (at the roots).

Art. 68. The señal may be made in the jaw, forehead, ear, or nose of the sheep.

Art. 69. The operation of señalando, or marking, shall be notified two days beforehand to all the neighbors so that they may attend, to pick out and mark their own: not giving such notice will be held a presumption of fraud.

Art. 70. When a farmer wants to dispose of a flock, or to mark with contra-señal some sheep he may have recently purchased or sold, the same notice must be given to the neighbors, as mentioned in preceding Article.

Art. 71. It is permitted to change the señal of a flock or given number of animals, but notice hereof must be given to the nearest authority, shewing the 'boletos' of the respective marks, or the 'guia' in case the animals be recently brought from another partido. Failing this, it will be a presumption of fraud.

Art. 72. It is also permitted to adopt a new mark for the 'increase', on the same conditions as in preceding Article.

Art. 73. Whoever may bring upon his land a flock with the same señal as used by any of his neighbors shall be obliged to change it, on being notified by the proper authority, under penalty of $500.

Art. 74. When two neighboring flocks may be found with the same señal, although in distinct partidos, the person that has last adopted same shall be bound, under the like penalty, to alter it in some manner.

Art. 75. The authorities in each partido shall take care that all the señal's be different; and if this be not possible, to prevent a repetition of the señal unless both establishments be at least three leagues apart.

Art. 76. Every Municipality (or in its absence, Juzgado) shall keep a register of the señal's existing in the partido with corresponding index of the owners' names.

Art. 77. Within six months from the promulgation of this Code, every sheep-farmer shall enter his mark or marks in the above register.

Art. 78. A señal without a boleto is invalid.

Art. 79. All vouchers, certificates, and transfers of señal's already registered shall pay a fee of 20$ each.

Art. 80. No charge shall be made by the Municipalities or Juzgados to sheep-farmers for certificate (on unstamped paper) of the registry of their mark or señal.

Section 10th.

Mixtures.

Art. 81. When two flocks get mixed they shall be parted out as soon as the owner of either so demand.

Art. 82. The owner of the flock that may have caused the mixture shall be permitted to mark the lambs beforehand on the camp, beside their dams; after which, both flocks shall be shut in for a parting.

Art. 83. As soon as the parting be concluded, or should night come on before finishing, one of the flocks shall be shut up in the corral, and the other left outside, so that the lambs may suck out their dams.

Art. 84. If the mixture occur on the boundary of both owners or in camps of a third party, it will be necessary to cut the flocks, each man driving off his own: and if the lambs of one be marked, and the other not, the latter shall take out the unmarked. But if the lambs of neither be marked, both shall do so at once on the camp, lasso-ing the lambs beside their dams. If the lambs of both be marked the flocks shall be parted out in the corral.

Art. 85. These regulations shall be without prejudice to both parties in case they mutually arrange not to part the flocks in a corral, but in the open camp, or in any other manner they may both prefer.

Section 11th.

Guias or Passports.

Art. 86. The Justices of Peace shall continue to give Guias, on stamped paper as prescribed by law, for the removal from their respective partidos of all kinds of cattle, hides and produce; but in no case unless the marks and señal's of the owner be entered in the proper register. Neither shall it be lawful to give Guias for removing unmarked calves (the sale of which is prohibited) unless comprised in stock sold 'by the cut' and following their dams.

Art. 87. The Guias shall be in strict accordance with the certificates of sale given by the owner or his agent.

Art. 88. The certificates must be presented at the Juzgado either by the buyer taking away the cattle, or by the owner or agent removing them on his own account: they must specify the kind and number of animals or produce, the marks or señal's next following, the name of purchaser, place and date.

Art. 89. The Juzgados shall regularly number these certificates as they are presented, filing and preserving same.

Art. 90. In the Guias the marks shall be set down in the middle, and then it shall be expressed in writing how many marks the Guia contains.

Art. 91. In case the Guia comprise not only produce but also cattle of one or other kind, it shall be specified whether the latter be for the markets, saladero, breeding &c.

Art. 92. All animals and produce duly furnished with Guia shall be respected by the Tabladas and authorities on the route; but if the latter have knowledge or well-founded suspicion of fraud, it shall be lawful to detain the property in question provided an immediate enquiry be instituted.

Art. 93. Any Guia for produce shall be held suspicious in case the partida in question be known not to produce such number or kind of produce.

Art. 94. If the suspicion or question turn out unfounded, the troop shall be allowed to continue its journey.

Art. 95. When comparing the Guia with the cattle detained, in case the difference be but slight and that the conductor be a regular Abastecedor or cattle-jobber, the authorities may allow the troop to proceed, without prejudice to any investigation that may afterwards be instituted, or proceedings against the conductor or his bail.

Art. 96. But if the conductor be simply a driver in the service of a cattle-jobber, or the owner himself of such cattle or produce, then, before allowing the troop to proceed, the Justice of Peace shall require, of such driver or owner, suitable bail to answer the results of such enquiry; and in case such bail be not forthcoming, he shall embargo the animals or produce; if animals, he shall feed them for four days; if produce, detain same for 30 days; and at the end of these respective terms he shall sell them by public auction, putting in deposit the proceeds of such sale.

Art. 97. Besides the measures above expressed, the Justice of Peace shall write to the Justice who gave the Guia, requesting an explanation of the difference found in same: and if it result that the difference arose from inadvertence or negligence of the Justice giving the Guia, the Justice who has embargoed shall take off the embargo, cancel the bail, and give up (on payment of expenses incurred) the animals or produce if not yet sold, or their proceeds in case already sold. Moreover, the interested parties may demand of the Justice who

gave the Guia such amount of costs and damages as they can prove to have incurred from his negligence.

Art. 98. But if it result from the Justice's explanation in reply, or other evidence, that the Guia is a forgery or fraudulently altered in an essential point, the conductor, driver, or owner, if within reach, shall be arrested by the Justice and sent with the proper Sumario or information (and bail, if any) before the proper Judge of 1.ª Instancia. If the cattle or produce be already sold, he shall transmit also the amount of same, after deducting costs and expenses; if not yet sold, he shall detain same until receiving orders from the Judge of 1.ª Instancia.

Section 12th.

Water-supply.

Art. 99. On the expiration of a year after the promulgation of this Code every estanciero or owner of sheep or cattle, whose land [be it his own or rented] may be wanting in water, shall be obliged to make a sufficient number of wells or procure other means for water-supply so as to prevent his cattle straying away on other people's land, under a penalty of 1,000$: at the same time the Justice of Peace shall give him a fixed period wherein to provide himself with such water-supply and in case of again failing to do so the fine shall be doubled.

Art. 100. If the cattle, owing to want of water, go on a neighbor's camp in quest of it, the owner of the latter may demand from the trespasser, for grass and water, the sum of five dollars a head, for horses or horned cattle.

Art. 101. The Municipalities, or (wanting these) the Justices of Peace shall appoint inspecting-committees to see that the water-courses or artificial supplies be sufficient and proportionate with the number of live-stock, taking such measures as may appear convenient from the report of such committees.

Art. 102. The regulations under this heading are not obligatory in seasons of great drought such as mentioned in Art. 15, and when the local authorities find that in spite of everything the scattering of flocks and herds is inevitable.

Section 13th.

Drovers.

Art. 103. Drovers must be regularly enrolled in a register kept by the Department of Policia, having previously produced a suitable guarantee, and thereupon the Police will give them a certificate or 'papeleta' with its proper number and seal, to be renewed every year: entirely free of charge.

Art. 104. The party offering as bail shall guarantee the drover's good conduct in his line of business, as well in relation with the peons accompanying him as with the farms and establishments he may visit; but he does not answer for any purchases the drover may make unless he has given him a written power to this purpose making himself responsible for transactions of the kind, in which case the drover shall mention same in any receipts or documents he may give.

Art. 105. Whoever acts as drover without being registered or having his 'papeleta', or any drover carrying a 'papeleta' already out of date for want of renewal, shall be fined 500$.

Art. 106. Any drover carrying a false 'papeleta', or who may commit cattle-stealing either as a principal or accomplice, shall be seized, prosecuted, and sent before the Judge of 1.ª Instancia. And if found guilty he shall be for ever after incapable of acting as drover.

Art. 107. The drover, on making up his troop of animals, shall require of the owner or mayordomo of the establishment a certificate expressing the number of animals, male and female, with a drawing of the mark and señal and shall present this at the Juzgado for his Guia.

Art. 108. Besides his certificate the drover shall always carry the boleto or ticket of the horses and oxen of his mark that he takes with him, and also of the peons' horses: in accordance with these documents the Justice of the partido where the troop is made up shall give a certificate of the number and marks of each animals, giving also the names of the parties who have lent or given them on hire in case they be borrowed or hired.

Art. 109. While on his way with the cattle the drover cannot—

1st. Add other animals to the troop, under pain of suspicion of robbery.

2nd. Sell any of the animals or produce he may be conducting, unless the Justice of the partido where such sale occur note same on the Guia; otherwise such sales to be reputed fraudulent.

Art. 110. A cattle-driver belonging to the city markets or suburbs sh take the animals to the proper Tabladas; and here the Commissary shall cou them according to the Guia: if he find no difference, and that all is right, h shall note same on the Guia and give the drover free-pass.

Art. 111. But if the Commissary should find any differences he will co give a free pass on production of good bail for the fulfilment of what may b afterwards ordained: and for this purpose he shall at once proceed to make th investigations, acting on same, and resolving the matter in person if it be not case of gravity, but if grave circumstances appear he shall send all the inform tions before the proper Criminal Judge of 1.st Instancia.

Section 14th.

Market-butchers.

Art. 112. Market-butchers, besides being registered at the Policia, lik the drovers and giving bail to a good amount for their conduct, must have thei domicile marked down in the police-books: then the Policia will give them a license, on their paying for same the duty fixed by law.

Art. 113. It is prohibited for market-butchers to have any kind of part nership with the public officials of the Corrales or Tabladas.

Art. 114. The market-butcher may himself bring in from the camp, with out the aid of drovers, any cattle, hides or produce, remaining in such case alway subject to the regulations affecting drovers as in Section 13.

Art. 115. The market-butcher on entering the Corrales shall take care to admit only the peons he may require, and to drive the cattle he means t slaughter to the exact spot where the Juez de Corrales may designate.

Art. 116. A majority of the market-butchers may hold meetings at whi the Juez de Corrales will preside, and their resolutions will be obligatory for th whole body of butchers.

Art. 117. At such meetings the market-butchers may regulate the rate of wages, hours of work, and such other details in general, imposing reciprocal fines for infraction of same.

Art. 118. They may also discuss among themselves and propose to Gov ernment, by medium of the Juez de Corrales, either the repeal, alteration or extension of the regulations herein contained in their regard, as well as respe

ng the drovers of the Corrales or Tabladas, or the adoption of such other new measures as they may find expedient.

Art. 119. Any market-butcher convicted of violating a bye-law as regards the wages of peons employed to sell meat, or of permitting his peons in the slaughter of animals to waste or steal meat, or of bribing or attempting to bribe another butcher's peons, shall be fined by the Juez de Corrales for benefit of the fraternity according to the circumstances; and if again convicted of such default his license shall be taken from him.

Section 15th.

The Judge of Corrales.

Art. 120. At each of the Corrales now existing in the North and South of the city, and in whatever may be hereafter established, there shall be a Judge duly appointed with a suitable salary, who may be at any time removed by the Government.

Art. 121. The functions and attributes of the Judge are—

1st. To preside at any meetings held by the market-butchers and submit to Government their bye-laws or projects for approbation.

2nd. To draw up and submit for Government sanction a complete code of regulations for the Corrales.

3rd. To arrange temporarily, until such regulations be duly sanctioned, everything relative to the hours for opening and shutting the Corrales at the various seasons, as also to the order and mode of working which the peons must follow.

4th. To confer with Government, whenever judged expedient, respecting any decree or resolution that the Government may purpose enacting.

5th. To keep a detailed Register of all the peons, noting down when they may leave employment and for what motives.

6th. To hear and decide verbally any questions or claims for wages between the market-butchers and their peons.

7th. To designate the exact spot where the cattle are to be slaughtered.

8th. To dismiss any peon who may be quarrelsome, vicious or disobedient to his employer; but if such peon have committed a robbery or other grave offence, the Judge shall draw up the proper information and hand him over to the Police with same, to be tried by the tribunals.

9th. To keep a book in which he will note down the number and date of the the Guias, the district from which they came, the number and kind of cattle brought to the Corrales, and the names of the owner, seller, and drover or conductor.

10th. To inflict and levy the fines established by Government edicts, keeping a register of same, and sending in the amount with official report every three months to the Government.

11th. To collect all taxes or imposts of Corrals not auctioned in the usual form, and decide any trifling question that may arise on the subject between the collector of such auctioned imposts and those paying same.

12th. To permit any person to slaughter his own cattle, either in person or through any of the market-butchers on paying the usual commission.

13th. To dictate such measures as may be necessary when animals escape from the Corrals, to fetch them back; and if this occur while the killing is going on, he may suspend the slaughter if he think fit.

14th. To give official returns or informations whenever the authorities may require same, and give private individuals any particulars or advices they may request.

Art. 122. The Judge of Corrals must reside in the neighborhood, and neither be a market-butcher, nor have partnership with anyone in the business under pain of dismissal.

Art. 123. He shall attend every day at the slaughter, being present from before its commencement till half-an-hour after its conclusion.

Art. 124. In case of sickness or other unavoidable absence he shall appoint a market-butcher to act provisionally in his stead, on such terms as they may arrange between them.

Art. 125. Any loss of cattle from the animals jumping over or breaking down the gates or fences must fall on the party bringing in the cattle; but the Judge must be responsible if the animals get out owing to the want of proper gates and fences, or to the neglect of the peons or watchmen of the Corrals

nd in this last case the Judge may oblige the watchmen to refund him such loss.

Art. 126. In the camp towns, the Municipalities or, wanting these, the Justices of Peace, shall fix and enact their own arrangements for market-corrals, where such exist, and for collection of the tax on same as laid down by law.

Section 16th.

Tabladas.

Art. 127. All troops of cattle, of whatever kind, brought in for the city-markets or adjacent saladeros shall continue as at present to be inspected at the Tabladas, and for this purpose a Police-commissary shall reside in the vicinity, to fulfil the duties expressed in Arts. 110 and 111.

Art. 128. No troop cleared at the Tablada can pass inward after sunset under penalty of 500$ to the drover: this sum (after deducting half for the informer if there be any) shall be sent to the Policia and entered down in a book of fines.

Art. 129. Any troop passing in without the Tablada passport shall be considered stolen, and be seized, and sold by the Commissary in public auction: the amount, with a list of the marks, shall be sent to the Policia, which shall keep same and give due notice in the newspapers, giving it to the party who may prove he is the owner within 12 months following, after deducting ten per cent for the informer if any. If no owner turn up in 12 months, the amount shall be confiscated to the State, less one-half to be given by the Police to the informer if any.

Art. 130. Besides the general Tabladas at present existing and such others as the Government may establish at such times and places as expedient, it shall at once establish special Tabladas at Bahia Blanca, Patagones and Azul, with suitable regulations, for the particular vigilance and reception of cattle and produce brought in by the friendly Indians.

Art. 131. The Government shall also establish a similar Tablada at some point of the frontier bordering on Santa Fé, for special supervision of cattle or produce crossing the frontier, and to prevent the exportation of same unless bearing the counter-mark.

Art. 132. Each country-town may establish a Tablada, to inspect and count animals and produce intended for the consumption of such town or of the estancias, houses, saladeros, factories &c. existing in the partido.

Art. 133. In each of such Tabladas there shall be from one to three inspectors, according to the size and situation of the partido, appointed annually by the Municipality, or wanting same by the Justice of Peace.

Art. 134. The Municipality or Justice of Peace shall have entire management of the tablada and the recovery of the legal imposts.

Art. 135. The inspectors shall be entitled to one-third of the amount of all cattle or produce confiscated when no owner appears to claim same within the term fixed in the Municipal bye-laws: the remaining two-thirds shall belong to the Municipality or Juzgado at whose expense the Tablada is maintained.

Section 17th.

Saladeros and Graserias.

Art. 136. The owners or managers of saladeros and graserias near the city shall advise the respective Commissary when they are going to kill.

Art. 137. They can neither receive cattle after nightfall nor kill any on hand.

Art. 138. In case of infringing either of the above Articles, the Commissary shall impose a fine of 20$ to 40$ per head of cattle, according to the class of animals and circumstances of the case, the half of such sum to be for the informer.

Art. 139. Saladeros and graserias may be established in the Campagna, but the farmer establishing same can only kill cattle of his own mark, or that of his neighbors on depositing at the Juzgado the owner's permit for same.

Art. 140. For any infraction of the above article the Justice of Peace shall inflict a fine of double the value of each animal, besides the criminal action that will lie against the offender.

Art. 141. The owners of cattle unlawfully killed in this manner may recover from the saladerista the value of such cattle: the fine shall be given to the Municipality, less one half for the informer if any.

Art. 142. Such as limit themselves to killing only their own cattle shall only be obliged to give 24 hours' notice to the nearest authority.

Art. 143. Those who kill other people's cattle, with their written permit, hall give 48 hours' notice to the Justice of Peace, in order that the latter may n person or by means of a subordinate compare the cattle with the Guias or certificates.

Art. 144. In case the authorities should not attend at the time specified, he saladerista may begin to kill the animals at once; without prejudice to any responsibilities that may otherwise arise.

Section 18th.

Wild cattle, or Haciendas Alzadas.

Art. 145. At 18 months from the promulgation of this Code, any estanciero having wild horned cattle shall incur a fine of a *hundred thousand dollars*, and the Justice of Peace is moreover prohibited from giving him Guias, after that term, even for removal of his tame cattle.

Art. 146. At 4 years from same period no estanciero shall be permitted to have troops of wild mares, under penalty of the Municipality or Justice catching them at the estanciero's expense, selling them by auction to be slaughtered, and devoting the amount to the Municipal funds.

CHAPTER 2nd.

TILLAGE.

Section 1st.

District of Chacaras and Quintas.

1st. *The suburbs.*

Art. 147. At 3 years from the promulgation of this Code, a radius of 10 leagues around the city of Buenos Ayres, measured from the Plaza Victoria, shall be destined for chacaras and quintas, all which shall be considered the suburbs of the city.

Art. 148. The rearing of large cattle shall be excluded from this radius, but sheep or smaller animals may still be raised herein.

Art. 149. The superficial extent of such chacras or quintas is optional, but the regulations about roads and streets, either now existing or hereafter decreed, must be observed.

Art. 150. In the exclusion of large cattle, laid down in Art. 148, this does not apply to small herds under 200 head, that may be necessary for quintas or the labors of a chacara. Any one having over that number shall pay a fine of $500 to the Municipality.

Art. 151. Neither does the prohibition extend to dairies, which may have any number of animals judged requisite, nor to animals for any industrial establishment.

152. Such large cattle as permitted by the two last articles, must be kept, if in unfenced chacaras, under care of a cow-herd by day and locked up by night.

Art. 153. The violation of the previous article shall involve not only compensation for whatever damage the animals may cause, but also a fine of $200 by the local authorities, even though no damage be done.

Art. 154. The amount of such compensation, in case the interested parties cannot come to an arrangement, shall be assessed by the Justice of Peace according to a valuation made by two suitable persons named by the parties at issue or (in case of their refusal) named by the Justice, and in case the valuators cannot agree the Justice shall be umpire, and the amount he estimates paid down without waiting for appeal.

Art. 155. As regards sefial's, mixtures, guias &c. respecting sheep, within these 10 leagues, all the prescriptions laid down in Sections 9, 10, and 11, of Chapter 1st shall be observed.

2nd Grain-growing districts.

Art. 156. In all partidos beyond the radius of 10 leagues, tillage or farming may be continued or even extended to any degree, as at present: but, not for this reason can the raising of horned cattle be excluded from such districts.

Art 157. The raising of horned cattle shall be excluded as heretofore from the partidos which are entirely or principally agricultural, as also from such parts or districts as are already declared to be grain-growing.

Art. 158. In cases where pastoral establishments still exist within municipal districts, they shall be tolerated for 10 years after the promulgation of this Code. But if the farmer choose to fence in his ground, he shall not be obliged to give up grazing even at the expiration of the 10 years.

Section 2nd.

Watching and shutting in cattle.

Art. 159. The shutting in of cattle, mentioned in Art. 152, must be observed also at 'siesta' time, in the proper season, where such is usual, under the penalties laid down in Arts. 153 and 154.

Art. 160. Yokes of oxen belonging to waggons must be kept grazing under care of a herd by day, and shut up or tethered during night and siesta-time: they cannot be taken to water other than by the path marked out by the owner of the land, under penalty of a dollar for each animal, in favor of the owner of the land, in case he demand same.

Art. 161. It shall never be lawful to let loose animals proceeding to the markets or saladeros, or from one partido to another, to graze upon anyone's land without previous permission from the owner, under the same penalty as in last article, besides making good any damage they may have caused.

Art. 162. It shall be prohibited, under a municipal fine proportionate to the circumstances, to 'round' the cattle of chacras by night: but the Municipalities may permit it in exceptional cases, especially with poor, labouring, men who have only a few oxen; they shall be, however, obliged to make good any damage caused by their animals through the negligence of the herd or person 'rounding' them.

Section 3rd.

Servidumbre or Right of way.

Art. 163. Low grounds are subject to 'servidumbre' so far as being forced to receive the waters that naturally, and without the work of man, flow down from higher grounds.

Art. 164. The owner of ground bounded on all sides by his neighbors', and who may have no outlet on the public highway, has a right of way through his neighbors' lands, even with vehicles to convey his produce, but he must make good any damage he may cause.

Art. 165. No owner of land can plant trees on the very boundary-line, but at some distance inwards, so as not to prejudice his neighbor by their roots or shade.

Art. 166. As respects other rights of 'servidumbre' whether permanent or temporary, as well as concerning their term of duration or expiry, the prescriptions of civil law shall have force; and any doubt or question that may arise on the subject shall be referred for decision to the respective Juzgado of 1.st Instancia.

Art. 167. When a stream or river is the boundary between two or more lands, the owner or owners of those occupied by horned cattle may penetrate as far as 40 yards within the boundary of a neighbor having no horned cattle, either to prevent their cattle getting on strange camp or to drive them home to their own in case they should have gone on the neighbor's.

Section 4th.

Highways through the chacras.

Art. 168. The prolongation of the three great highways—northwards to San Fernando, westwards by San Jose de Flores, and southwards by Barracas—as far as the 10 leagues expressed in Art. 147, shall follow the same width as already marked out, according to the line of buildings on the route.

Art. 169. Wherever the width cannot be so determined, it shall be judged according to the position of old ditches, fences or trees.

Art. 170. Wherever, within said 10 leagues, none of the marks mentioned in the two last articles can be found, the width shall always be taken at 30 yards.

Art. 171. If it should appear that there are recent signs of the road having been narrowed, without due permission, or its direction altered by means of new ditches, wire-fences &c., the Municipalities, besides inflicting a fine of 200 dollars per cuadra in length, shall order the trespassers to restore the road to its ancient bounds, giving them a reasonable time to do so, and in case of disobedience the fine shall be doubled.

Section 5th.

Trespass by animals.

Art. 172. For any animal trespassing by day, without causing damage, in an unfenced chacra or quinta, the owner of the land may detain the animal and demand three dollars a day per head of horned cattle or horses, and one dollar for sheep or small animals, as compensation.

Art. 173. In case the place be fenced or wired in, or even not being so, if the animals cause injury to trees, plantations, gardens &c., and that the interested parties cannot come to an arrangement, the amount of indemnity shall be assessed by the Justice of Peace, after personally inspecting the damage done, or getting two suitable persons to estimate same.

Art. 174. If the amount exceed a thousand dollars there shall be room to appeal from the Justice's decision to the Judge of 1.st Instancia.

Art. 175. If no owner appear to claim the animals, and that the owner be unknown, the party suffering trespass shall, after 8 days, hand them over to the Justice of Peace: if no owner appear within three months, the Justice shall sell them by public auction, to be slaughtered and skinned, and if the animals be horses the same rule shall be observed as in 2nd paragraph of Section 2, Chapter 3.

Art. 176. From the proceeds of sale, after satisfying all costs and expenses incurred, the Municipality or (in its stead) Justice of Peace shall pay the injured party the proper compensation, and keep the remainder, if any, for the owner of the animals.

Art. 177. This money shall be kept in deposit for 12 months, and if the owner of the animals do not appear in that period, the amount shall be handed over to the Municipal treasury.

Art. 178. In case the proceeds of the auction-sale do not suffice to cover the amount of damage, the injured party may at any time afterward claim the balance from the trespasser in case he find him.

Section 6th.

Fences.

Art. 179. It is entirely optional to put down, pull up or remove the fences of a quinta or chacra, provided the fence do not interfere with a highway or bye-way already existing, or with a legal or customary right of way.

Art. 180. It is also optional to make the fences of trees, hedge, brick, timber, or any other material found convenient.

Art. 181. Any neighbor wishing to put up a fence must first notify the Municipality, as the latter may have some special reason to prevent his doing so; penalty 150 dollars per cuadra.

Art. 182. If the intended fence should be in a locality where it may be judged fit to open a bye-road, a lane must be left open 10 yards wide, under penalty of being afterwards obliged to take up the fence and leave such space open, besides the fine expressed in Art. 171.

Art. 183. If, on the contrary, the proposed fence should be in a place where no bye-road is wanted, and happen to complete the fence of another neigh-

bering quinta or chacra, the owner of the latter can be compelled to pay his proportionate share of the cost of the fence.

Art. 184. All questions between neighbors, about fences already made or in contemplation, shall be decided without appeal by the Justice of Peace, after duly investigating the case, but if the question involve title-deeds an appeal shall be freely given to a higher court.

Section 7th.

Seizures or embargoes.

Art. 185. The animals used in working a chacra or quinta, as well as farming implements, machinery, seed in barns, and manure, shall be considered accessory of the soil and participating of the nature of real estate,

Art. 186. Bee-hives and silk-worms while the insects are at work shall be included under the same category as above.

Art. 187. All the above-mentioned articles are therefore included in the sale, barter, legacy or donation of the ground, as also in its forcible transfer: in like manner they are affected by any mortgage on the land and may be distrained or embargoed in a judicial execution on the estate.

Art. 188. It shall never be lawful to distrain or embargo crops that are being reaped or gleaned, and the seizure cannot be made till they are properly harvested and put in the barn; but the Justice may, at the creditor's request, appoint a care-taker in case the debtor cannot produce good bail.

Section 8th.

Water-supply for chacras.

Art. 189. All the regulations laid down in Section 12, Chapter 1, respecting water-supply for estancia-lands shall also have force with regard to chacras and sheep-farms within the 10 leagues expressed in Art. 147.

Art. 190. The year, however, established in Art. 99, shall be understood as half a year with regard to chacras.

Art. 191. The Municipalities are authorized to use a wise discretion in prolonging as often as necessary the term therein laid down, in its application to small chacras, especially when the owners are poor.

Section 9th.

Swine.

Art. 192. In lands not fenced in, whether rented or not, the proprietor cannot keep more than 12 pigs, between big and little, without a herd to mind them, under penalty of fine.

Art. 193. If the pigs be found trespassing on strange land, although they may have caused no damage, the owner of the land may exact the fine expressed in the tariff, keeping them until same be paid. For a second trespass the fine shall be doubled, and for a third time, trebled.

Art. 194. But if they have caused damage of any kind, the owner of the pigs, besides paying the fine shall indemnify the owner of the land.

Art. 195. If the parties cannot agree on the amount of compensation, this shall be assessed by the Justice of Peace as prescribed in Art. 154.

Art. 196. And if the pigs cause damage a second time, no matter what their value or number, the injured party may kill them and notify the nearest authority of his having done so.

Art. 197. The various fines spoken of in this Section shall be established and set down in a tariff by the Municipality of the Partido, such tariff to be hung up in a public locality for general notice.

Section 10th.

Pigeons, bees, and poultry.

1st. *Pigeons.*

Art. 198. Anyone finding pigeons on his land during the sowing-season may fire at them, but he shall be responsible for any injury caused by his shot to his neighbors' persons or properties.

Art. 199. If pigeons leave their place spontaneously and without any fraud or artifice to entice them away, and settle in another pigeon-house, they shall then belong to the owner of the latter.

2nd. Bees.

Art. 200. No one can have bee-hives within a league of any town.

Art. 201. If the swarm break away, the owner may follow and claim them, so long as he does not lose sight of them, and for this purpose he may cross his neighbors' lands if even fenced or sown, with permission of the proprietor.

Art. 202. In case the owner of the land will not let him enter, and that he knows where the swarm of bees is, he may within 6 days next following claim them before the Justice of the partido.

Art. 203. But if the owner of the swarm should not follow it, or claim it before the Justice within six days, the bees shall then become the property of the owner of the land on which they have settled.

3rd. Poultry.

Art. 204. If hens, turkeys, ducks or other poultry should get on a neighbor's land and cause injury to seeds or fruits, the owner of the latter may demand compensation, and if the amount cannot be agreed on, the Justice of Peace shall assess same either in person or by means of another.

Art. 205. If it happen a second time, the injured party, besides exacting compensation, may kill or maim the fowls, without making use of them, as he must return them killed or maimed to their owner.

Art. 206. If poultry be frightened and fly into a neighbor's land the owner may claim them during eight days: after that term they shall belong to the owner of the land.

CHAPTER 3rd.

REGULATIONS

COMMON TO CATTLE-FARMING AND TILLAGE

Section 1st.

GENERAL INTERPRETATION IN EXCEPTIONAL CASES.

Art. 207. Besides the prescriptions contained in this and the following chapters, which, by their nature, are always especially applicable either to chacras or estancias, those regulations referring to estancias in Chapter 1st, Section 1st, Articles 11 to 15, are also applicable in accidental cases, according to the circumstances, to chacras.

Section 2nd.

CATTLE-STEALING.

Art. 208. Anyone is guilty of cattle-stealing, who steals one or more horses, cows, or sheep, whether wild or tame, either taking them from a neighbor's camp to his own, or finding them in his camp and killing or making use of them, or killing them, no matter where, to take the whole or any part of the animal.

1st. *Cattle-stealing in general.*

Art. 209. In cases of cattle-stealing where the value of the animals does not exceed twenty thousand dollars, the Justice of Peace of the partido shall hear and decide in the first instance, beginning by drawing up the information and arresting the party or parties suspected: he shall then return such of the animals as he may find the owners of, and embargo the rest.

Art. 210. He shall next proceed to examine and adjudicate the cause, ting his sentence into execution if there be no appeal; but if there be an peal he shall send the matter before the proper Judge of 1.ª Instancia, ing with the party or parties under arrest and retain the animals until the dge's decision, and this shall be held as final.

Art. 211. In cases of cattle-stealing, both the Justice of Peace and Criminal Judge shall proceed with rapidity, reducing the 'terms' to as few days as ssible, but observing the forms and proceedings essential in all trials—the audience, the proof, and the sentence.

Art. 212. In case of condemnation, besides returning the animals to their owners, with indemnity for any injury caused them by the robbery, and payment of the judicial and other costs and expenses, the thief or thieves and their accomplices shall be sentenced *in solidum* either to a fine in favor of the partido or to public works.

Art. 213. The term of duration of such public works shall be calculated for double the amount of the fine with reference to the current rate of wages: but in no case to exceed three years. If it exceed six months, the Justice of Peace must send the case for superior approval.

2nd. Horse-stealing.

Art. 214. If the animal stolen be a horse, mare, or mule for riding, besides the 5 last preceding articles, the following special regulations shall hold.

Art. 215. In any place a person meeting an animal of his mark may seize him, whether with or without a rider, and hold him, but if the party with the animal refuse to give him up, the owner may apply to the Justice of Peace or nearest civil authority, although not in the district where either party reside.

Art. 216. Any person may freely use a neighbor's horse for riding, but he must have a written certificate from the owner shewing the animal to be lent. Failing this, anyone found on a strange horse shall pay a fine of five hundred dollars or be condemned to a month's public works.

Art. 217. Whoever purchases or receives a present of saddle-horses and wishes to remove them from the partido must first get them counter-marked, or have a certificate from the seller or giver counter signed by the Justice of Peace or nearest Alcalde. Failing to do so will be a strong presumption of robbery.

Art. 218. When any estanciero or laborer may find on his camp or among his animals a strange saddle-horse, he must give notice within 15 days to the owner if known, or else to the Alcalde of the district, under a penalty of two hundred dollars in favor of the Municipality.

Art. 219. Eight days after such notice if the owner do not present himself to claim the horse or horses, the authority of the partido shall take charge of them and publi h notices in the most public localities respecting such horse or horses, with the marks on the margins: if the owner appear he shall pay ten dollars a head as compensation to the owner of the land. If the owner do not appear in a month from such notice being published, and that the neighboring Justices of Peace also announce that the owner cannot be found, the Justice of the Partido may then employ the horses for the public service.

Art. 220. There shall be more or less room for suspicion of robbery—wanting the document mentioned in Article 216, and the counter-mark or certificate mentioned in Article 217; or any alteration or disfigurement of the mark; or the absence of proper explanations when the counter-mark is wanting.

Art. 221. Whoever, not having parted with a horse of his mark, may find same in any place, even with the ear cut off or mark of the State, may claim him before the proper authority.

Section 3rd.

Masters and Servants.

Art. 222. A rural master is anyone who contracts for the services of a person to look after his rural property, and a rural servant is any person giving such services, for a certain salary or remuneration.

Art. 223. The servant or peon must either execute generally all such labors as the nature of the establishment may require, or perform special duties already allotted him; he may, therefore, be employed either by the day, fortnight, month, or year; or else for a particular task or job.

1st. *Labor in general.*

Art. 224. From a year after the promulgation of this Code, no peon or laborer (except those hired by the day) can be hired to work on any estancia, chacra, or quinta without a written contract.

Art. 225. The contract shall clearly express the kind of work, term of employment, salary or wages, and everything relative to the hours of work each day, according to the kind of labor, season, &c.

Art. 226. Every contract shall express (and even if it do not, it shall be understood) the clause that except in shearing and harvest-time the peon shall

have a right to rest on Sundays and holidays of obligation, always provided this be compatible with the kind of service for which he is hired.

Art. 227. The contracts shall be drawn up by the Justice of Peace in a Servants' Book which he shall keep, and be signed by him as well as by the employer and employee or by others at their request; and he shall give a legal copy to either party on applying for same.

Art. 228. The Servants Book and copies aforesaid shall be either on plain or stamped paper as the law of 'papel sellado' may determine on this point.

Art. 229. When a necessity may suddenly arise for some urgent work out of the hours expressed in the contract, the peon must perform same on being so desired by his master; and the latter must pay him what is customary for overtime, according to the amount of work done.

Art. 230. If the work has been interrupted by storms, bad weather, and such like causes, the master shall pay in proportion to the hours of work done.

Art. 231. When a peon is called away for military service on the frontier or elsewhere, the contract shall be considered rescinded.

Art. 232. When a master wants to send one or more peons for a given work beyond the limits of the partido, he shall furnish them with a written document expressing the number of days that he calculates they will require to execute the commission; after which the peon who may be found beyond the limits of the partido, and cannot shew he was prevented by illness or other insuperable obstacle from returning home, shall be sent by the Justice of the partido where he may be found to that of his own partido, in order that the latter may hand him over to his master and fine him $50 for the Municipality.

Art. 233. If any doubt or question arise between master and peon, about the amount of wages advanced or the interpretation of any old or obscure clause in the contract, the Justice of Peace, in the absence of other testimony, shall decide according to the master's account-book, making the latter swear to the correctness of same.

Art. 234. Unless by mutual consent, or for some very clear and unavoidable cause, neither can the master dismiss the peon before the contract expires, nor can the peon abandon his master, and least of all during shearing or harvest-time.

Art. 235. In case of any question about the fulfilment of the foregoing article the Justice of Peace shall decide, without appeal. He may order compensation, if any loss has been sustained; and if he find that either party has acted in bad faith, he may further impose a fine of fifty to five hundred dollars in favor of the municipal funds, or else public works for a term not exceeding one month.

Art. 236. The Justice of Peace shall also have exclusive jurisdiction to hear and decide all question about the nullity or rescinding of a contract.

Art. 237. During the term of contract a master may dismiss a peon for being disobedient, idle, or vicious, and in this case he must set down the cause on the back of the contract: the peon, if he consider himself unfairly treated may apply to the Justice of Peace for vindication of his character and compensation of the injury caused him.

Art. 238. The peon shall reside at his master's house, or in one of his puestos or out-houses, as the master may determine, except they make a mutual agreement to the contrary.

Art. 239. The master alone is responsible in a civil sense for any act or injury done by the peon in fulfilling his orders: he shall also be responsible in a criminal suit, as well as the peon, if his orders lead to the commission of a misdemeanour.

2nd. Jobs or special works.

Art. 240. A peon hired for a job is in effect an Empresario or contractor who undertakes to carry out, on an estancia, chacra, quinta or other rural establishment, a certain work or task, either in a given or undetermined period and for a round sum of money payable in the manner and time he may arrange with the master.

Art. 241. A peon for job or task work, unless mutually arranged to the contrary, is neither obliged to reside at the master's house or premises, nor to work at fixed hours and days; but simply to finish the job in a certain time if the contract stipulates any.

Art. 242. If the peon give up the job without finishing it, he forfeits any part of payment that may be coming to him, and may also be summoned before the Justice of Peace for any damage accruing from his giving up the job: if, on the other hand, he be dismissed without sufficient cause before finishing the task, the Justice of Peace shall condemn the master to pay him the whole amount of the job as agreed on.

Section 4th.

Squatters.

Art. 243. The right to have squatters, with or without family, is inherent in the rights of property and domicile; but, from a year after the promulgation of this Code any estanciero, proprietor of chacra, quinta or other establishment, who may have squatters either in his house or at any of his puestos shall be secondarily responsible with them for any fault or misdemeanour they may commit.

Art. 244. The responsibility of the estanciero &c. shall be always understood as merely civil.

Art. 245. In like manner, the owner or tenant of a piece of ground is also responsible in a subsidiary and civil sense, for any acts of squatters placed there by him.

Section 5th.

High-roads and Bye-roads.

1st. *High-roads.*

Art. 246. High roads are those which start from the city or elsewhere, and cross the whole or a large portion of the Campagna, or lead from one partido to another, and the use of which is not limited but common to all, being the property of the State.

Art. 247. The width of a high-road shall always be considered at least 60 yards.

Art. 248. In estancia lands the owner cannot, unless under special circumstances, fence in more than a league in length, without previous permission of Government, which will either grant or refuse it as the advantages or inconveniences may appear, from the informations and particulars acquired on the subject.

Art. 249. To fence in an area of more than 12 cuadras and less than a league in length, it is sufficient to have the permission of the Municipality (or vesting this the Justice of Peace), which shall send one of its members, or

other suitable person, to examine the ground and report on such roads as may be compromised or interrupted, and the decision shall be given in view of such report, but if any difficulty or doubt arise the matter may be laid before the Topographic Department.

Art. 250. All permission to make a fence must be understood as containing the condition that the fence may be taken up at a future time when the wants or increased population of the neighborhood require new roads to be opened in that direction.

Art. 251. The local authorities shall never consent to the closing-up of a high-road, or even to changing its course, without express permission of Government, and this shall be granted or refused as the merits of the case may show on due investigation.

Art. 252. The Government may hereafter open new highways on obtaining permission of the owners of the lands through which they are to run, or else by using the right of expropriation according to the law enacted for that end.

2nd. Bye-roads.

Art. 253. Bye-roads are such as only cross the whole or part of a partido, over public as well as private lands, whether open or fenced-in by the neighbors.

Art. 254. The Municipalities shall respect and preserve whatever bye-ways are at present used by the public, and which cannot be shut up without inconvenience, in their present width whatever it may be; but if it cause no inconvenience the neighbors may close the whole or part of a bye-way running through their lands.

Art. 255. Those which may be hereafter opened shall be at least 10 yards wide.

Art. 256. Any proprietor who may hereafter fence-in his land shall leave on the edge of it 5 yards for a bye-way, unless his property be very small, and in this respect the Municipality shall always enjoy a discretional power.

Art. 257. Waggons and all kinds of vehicles may go on a bye-road, but the bullock-carts will not be allowed to make a halt on one.

Art. 258. Each Municipality may establish, for a general rule, a tariff of fines for infraction of the preceding regulations.

Section 6th.

Fowling.

Art. 259. Ostriches, partridges, pigeons, and in general all birds, large small, as well as deer, nutrias, mulitas, and in a word all small and wild adrupeds found or living on a person's land, belong to the land and are the operty of the owner, tenant or occupier of the land.

Art. 260. It is prohibited to hunt wild-dogs, and where such exist isoned meat may be used to exterminate them.

Art. 261. Any person fowling or hunting birds or quadrupeds on nother's land, without previous permission of the owner or occupier, or his ca-tas or agent, infringes on the rights of private property.

Art. 262. Any person or persons so doing shall be fined (each) five undred dollars by the Justice of Peace, in favor of the Municipality, and if they e unable to pay the fine they shall be condemned to public works for a term quivalent in wages to the amount of said fine.

Art. 263. If the person fowling, although with permission of the owner or ccupier, should break down fences or cause other injury he must pay whatever ompensation the other may demand, and in case of disagreement the amount hall be assessed by competent parties appointed as in Art. 154.

Art. 264. In like manner the fowler must compensate for any injury aused by his shots to trees, fruits, crops, or domestic animals belonging to the eighbors. But if in firing he kill or wound any person, he shall then be rrested and sent with the usual informations before the Judge of Primera Instancia.

Art. 265. It shall be a trespass on public property to hunt or fowl on public lands without written license from the Municipality or Justice of Peace: uch licenses will only serve for the partido in which they are given; they shall be for a fixed period, and be drawn up on plain or stamped-paper as the yearly law of papel-sellado may determine.

Art. 266. Every Municipality (or, in its absence, Justice of Peace) shall study the preservation of the various species, and, for this end, publish timely notice of the seasons or months in the year in which alone it shall be lawful to hunt each species. It shall also post up a tariff of fines and penalties to be incurred by whoever violates this or the foregoing article.

Art. 267. Every owner, tenant or occupier of land may freely hunt a kind or species on his own land; remaining, however, always subject to prescriptions in Art. 264 and 266.

Art. 268. Any wounded game that may escape to or fall on a neighb ground, no longer belongs to the fowler but to the owner or occupier of t ground.

Section 7th.

Spontaneous products of the soil.

Art. 269. The ownership of all reeds, straw, thistles, firewood, bru wood, stone, gravel and other spontaneous products or adjuncts of the l belongs to the owner or occupier of the land, and these cannot be taken or m use of by any one else, but with his permission and for the price and condit he may demand. Any violation of this will be treated and punished as robb The remains of animals, being considered accessory to the soil, are also includ in this Article.

Art. 270. The above-mentioned products growing or found on pub lands, as also willow-plantations, woods and trees on same belong to the Mu cipality of the partido.

Art. 271. The local authorities shall make regulations in this matter, a be at liberty to fix a trifling impost for the use of such products; saving alw the inalienable right of the State to use or take them for public works or t general welfare. The authorities may, in like manner, impose a proportion fine on parties taking them fraudulently or without permission, or sentence offenders to public works in the district as in Art. 262.

Art. 272. For the present these two last Articles will not include t trees and other natural products of the islands of the Parana, which m continue subject to the Government regulations, until proper plans a reports be drawn up, when the Legislature will dictate suitable measures the subject.

Section 8th.

Camp-fires.

Art. 273. Every proprietor or occupant of camp may make fires in it, on his own responsibility, either to clear it of weeds, insects and noxious animals, or for any other useful purpose; but if by a wind suddenly springing up, or shifting round, or for any other blameless and natural cause, the fire pass his bounds and get on a neighbor's property &c., he is obliged to make good all damages and injuries so caused.

Art. 274. If the matter cannot be amicably settled with the injured party as to the amount of compensation, it shall be arranged as in Art. 154, with the limitation expressed in Art. 209.

Art. 275. If the party causing the injury cannot satisfy the whole or part of the amount of indemnity, the Justice of Peace shall sentence him to public works in the district for a term equivalent to the amount due, until it be fully satisfied, the Justice giving two-thirds of the wages so earned to the injured party, and the remaining third to the person so sentenced.

Art. 276. But if there be suspicious circumstances or evidence to the effect that the spreading of the fire to another property was not from natural causes but the work of malice or intent, the offender besides making good the indemnity as above ordered, shall be arrested, prosecuted and sent before the proper Criminal court.

Art. 277. It is strictly prohibited to set on fire waste public lands without previous written permission of the Municipality or Justice of Peace, under the penalties that may be fixed and published every year in the matter.

Art. 278. When for any necessary or useful purpose the authorities think fit to grant such a licence, they shall set down in it the limit of camp to be burnt and dictate such measures of precaution as may be called for by the vicinity of farm-houses, the season, and state of the camps.

Art. 279. If, nevertheless, the fire invade camps belonging to private parties, the same steps shall be taken as laid down in the foregoing Articles.

Section 9th.

Cattle-plague or contagious diseases.

Art. 280. Every estanciero, laborer, or owner or care-taker of cattle, especially sheep, who may see or suspect the existence of any plague or disease in his flocks or herds, that may prove contagious, is strictly obliged:

1st. To at once communicate the fact to the local authority.

2nd. To keep and tend the sick or suspicious animals under charge of a peon by day, and in a field or corral by night.

3rd. To bury the animals when they die.

Art. 281. The Municipality or (wanting it) the Justice of Peace shall take immediate steps to ascertain if possible the nature or intensity of the evil, and devise such precautionary measures as the circumstances may suggest.

Art. 282. At the same time it shall fully acquaint Government, and the latter (if it think fit) shall consult veterinary surgeons and experienced parties and send them out to the scene of disease, taking such measures as these parties may suggest, to stop and eradicate the evil, and if necessary drawing up special regulations which the local authority shall be strictly bound to carry out.

Section 10th.

Inland streams and rivulets.

Art. 283. No work of any kind can be erected on inland streams and rivulets that will impede the free course of their waters.

Art. 284. Any person infringing on this regulation shall be obliged to demolish the work or works constructed and to pay the damages so caused.

CHAPTER 4th.

RURAL POLICE.

Section 1st.

Its purposes.

Art. 285. In the Campagna, the police, besides their general duties respecting crimes or misdemeanors that are not purely of a rural character, have also interference in rural offences as expressed in the following sections.

Art. 286. The objects of the police are always to protect the rights, persons, and property of the public, to prevent, watch, and at times chastise.

Art. 287. Rural police is at present in the hands of the Justices of Peace in their quality of Commissaries.

Section 2nd.

Weapons and fire-arms.

Art. 288. The use of knives is strictly prohibited in towns, palperies and public gatherings, except when necessary for purposes of industry: in the first case the authorities shall destroy the weapon and impose a fine of 100 dollars or six days public works. In no case is it lawful to use a 'facon' or dagger.

Section 3rd.

Vagrancy.

Art. 289. Anyone shall be treated as a vagabond, who has no fixed resi-
nce or ostensible means of livelihood and whose bad conduct and vicious habits
e injurious to public morality.

Art. 290. The Justice of Peace shall look after notorious vagabonds or
ch as may be reported to him, and arrest them when sufficient grounds
ist.

Art. 291. Hereupon the Justice of Peace shall call two members of the
unicipality (or, in their absence, two Alcaldes) to form with him a Jury, and
ey shall give a verbal hearing to the accused, who may defend himself in per-
n or by another, producing at once such evidence as bears on the case, and
ciding it without further formality; all which shall be duly set down in an
ficial document on the subject.

Art. 292. All persons found guilty of vagrancy shall be sentenced, if fit,
military service, for a term of three years; if unfit to carry arms, they shall
e sent in to the Head police-office for public works for one year.

Section 4th.

Gambling and drunkenness.

Art. 293. Each Municipality or (if there be none) Justice of Peace shall
raw up regulations and publish the same in the district, respecting games of
azard and the use of spirituous liquors, according to the peculiar necessities of
he place, but on the following bases:

1st. To prohibit rigorously all games of hazard in pulperias, coffee-houses, inns, hotels and houses of entertainment.

2nd. To specify, indicate, and explain what games are included under the designation "of hazard."

3rd. To authorise police agents to enter any house of entertainment in which it is known or suspected that gambling of this kind is carried

on; but not without first presenting to the owner or his servant a written search-warrant to this effect from the Justice of Peace.

4th. To declare irrecoverable at law any gambling debt or sums lost on such occasions.

5th. To prohibit pulperos from selling to be consumed on the premises, especially when distant from any town, all intoxicating drinks or liquors; but to permit the sale of same in bottles or other vessels to be consumed at private houses.

6th. To fix the hours in the various seasons when pulperies may be kept open.

7th. To pick up any drunken person found in the streets, roads, or open camp; but not to take away those who may be in a public house or entertainment, unless at the request of the proprietor, or that the drunken person be quarrelling or making disturbance.

8th. To fix the penalties for the different violations of these rules, and for second offences, which will consist of fines of five hundred dollars on the owner of a house permitting games of hazard, and one hundred dollars on each of the players. And as respects the sale of intoxicating liquors, the fine shall be from one hundred to five hundred dollars, or imprisonment or public works not exceeding three months.

Section 5th.

Travelling pedlars and huxters.

Art. 294. Travelling huxters are allowed, on condition of not carrying any spirituous liquors.

Art. 295. Travelling pedlars and dealers are also allowed.

Art. 296. By travelling pedlars is understood all those who sell or barter dry-goods of all descriptions, either going the round of one partido, or passing from one into another, on foot, mounted, or with a vehicle.

Art. 297. Travelling pedlars and huxters are bound—

1st. If they proceed from the capital, to get a ticket from the Chief of Police, which will be given them gratis; and if starting for the first time from a camp town, to get it from a Justice of Peace, the authorities in either case requiring first the production of the necessary patent or license: these tickets cannot be given for a longer term than the patent. Anyone selling or bartering without a ticket, or with one of an expired date, shall be fined one thousand dollars, the half to be given to the informer if any.

2nd. To carry always the patent required for his business in the amount prescribed by law. Parties without a patent, or with one below the required value, or of an expired year, shall be fined by the Justice in the amount of the proper patent, the half to be given to the informer; besides obliging them within a certain period to take out a new patent, their goods remaining detained in the interim.

3rd. To get the proper Guia, when taking from a partido or despatching for the city any animals or produce they may have purchased or bartered with their effects; and herein they must adhere to the regulations about guias, laid down in Section 11 of Chapter 1st.

Art. 298. If among their dry-goods be found spirituous liquors, in such quantity as to shew they are meant for sale, besides confiscating same for benefit of the Municipality, the Justice of Peace shall demand a fine equal to one-third of their value, to be given to the informer.

Art. 299. The local authorities shall be especially vigilant that travelling pedlars and huxters have exact weights and measures, adopting such precautionary means as they may think fit, and over-hauling their weights and measures as often as requisite. Parties having wrong weights and measures shall be obliged to get proper ones instead, their wares being meantime detained, and shall be also fined two thousand dollars, two-thirds for the informer and the rest for the Municipal treasury.

Art. 300. Anyone with a vehicle or panniers carrying dry-goods, groceries &c. shall be reputed a pedlar or huxter.

Art. 301. Sheepskins cannot be sold without having the owner's mark inside, and cow and horse hides must have the proper counter-mark.

Section 6th.

Other rural offences and crimes.

Art. 302. Besides the rural offences already specified in this code, the following are to be also considered as such—Stealing by day-time vegetables, grain, fruits and domestic animals—Destroying or injuring trees in their trunks, branches, or bark—Making fires near properties that may be damaged hereby—Taking clay from the public roads or appropriating a part of their width.

Art. 303. In the cases mentioned in the foregoing Article, the Justice of Peace shall proceed to investigate the facts and the party or parties implicated, whereupon he shall impose on such offenders and their accomplices a fine not exceeding five hundred dollars, besides the indemnity for whatever damage done, and there shall be no appeal.

Art. 304. Besides the rural crimes already specified in this Code, the following are also to be considered such—Stealing any of the things mentioned in Article 302, if under cover of night—Scaling or breaking down walls or fences with intent to steal, or any act of violence or burglary even though the robbery be not effected or completed, with reference to the things mentioned in Article 302—Cutting, destroying or burning trees, crops, or plantations—Knocking down or injuring, with malice intent, bridges or highways—Stealing, pulling down or removing 'mojones' or land-marks.

Art. 305. In the aforesaid cases the Justice of Peace, after drawing up the usual informations and arresting the real or supposed authors and accomplices, shall try the case and pass sentence, observing the essential proceedings in all suits. He shall impose, besides civil reparations, fines not exceeding five thousand dollars in favor of the municipal funds, or public works not exceeding six months, allowing an appeal before the Judge of Primera Instancia, in which case the informations, arrested parties and *corpus delicti* shall be forwarded to said tribunal.

Section 7th.

Penalties.

Art. 306. In rural matters the penalties are always and in all cases either a pecuniary fine, or detention, imprisonment and public works.

Art. 307. The detention and public works may be for hours, days, months nd even years.

Art. 308. In like manner, according to the nature and circumstances of e offences or crimes, accessory penalties may be inflicted in the forfeiture of me goods, the payment of costs and expenses, or the civil reparation or indemity of any injury.

Art. 309. All indemnity or fine due to a private party shall be paid in eference to any fine in favor of the local authorities.

CHAPTER 5th.

SPECIAL REGULATIONS.

Section 1st.

SPECIAL FUNCTIONS OF THE LOCAL AUTHORITIES.

Art. 310. The Municipalities and Justices of Peace are especially charged and recommended to procure by means of advice and persuasion.

1st. That parents, relatives and guardians send their children to the State-school at least for a part of the year.

2nd. That small holdings of land be not overcrowded with a disproportionate number of animals.

3rd. That small land-holders who have horned cattle do not rent out to others fractions of their lands, to avoid in this manner the continual and reciprocal cases of trespass by animals and other like questions.

4th. That the estancieros and agriculturists lay in beforehand a stock of hay &c. to provide against seasons of drought &c., for which purpose they will sow alfalfa fields in proportion to their stock and to the extent of their estancia, puesto or chacra.

5th. That the proprietor, tenant or occupier of lands make such regulations about fowling as to harmonize as much as possible with the prescriptions of Section 6, Chapter 3rd.

6th. That every year, when the thistles become very thick, each man cut down as much as he can, in order to reduce this great obstacle to the free pasturage of the flocks.

7th. That each house, and especially each puesto, have a proportionate area fenced in, and if possible wired, within which to plant trees.

8th. That a shade be afforded the flocks in summer by planting paradise or other shady trees in an area equal to the size of the corral; and in like manner a shelter in winter against the cold and storms, by planting on the South side of the corral a thick row of willows.

9th. That the wealthier neighbors, especially agriculturists, purchase here or import from Europe or the United States as great a number as possible of machine farming implements, and the newest methods for facilitating farming operations

Art. 311. The Municipalities or Justices or Peace ought to stimulate, by offers of prizes, the invention or introduction into the partido of efficacious machines or other methods for the extermination of insects or vermin injurious to trees and plants. They should also prohibit and punish the shooting or destruction of the various kinds of birds that destroy or feed on such insects.

Art. 312. The same authorities shall appoint, every year or in special times of drought &c., a committee of neighbors presided over by a member of the Municipality, to make a round of the various establishments in the partido and to examine and report as to whether the regulations are observed, especially with regard to water-supply; and in view of such report, they may dictate suitable measures . propose same to the Government if beyond the orbit of their faculties.

Art. 313. It is advisable to divide all the sheep and cattle-partidos into great sections, for exhibition purposes, and to this end the Municipalities or Justices of a convenient number of neighboring partidos shall make arrangements between them.

1st. To get up and defray from the various partidos a locality or site whereon periodical festivals will be held, principally for the purpose of a formal "Exhibition of animals."

2nd. To begin by forming a Committee of Directors who shall arrange, among other things, the manner of raising funds, the place where the Exhibition is to be held, the prizes to be distributed, and the length, order and method of the function.

2nd. and last Section.

Final enactments.

Art. 314. All separate laws, decrees and enactments hitherto dictated in rural matters are hereby repealed and declared void; and in future none but the regulations comprised in the present Rural Code can be quoted or alleged

Art. 315. Every inhabitant of the Province, and especially every farmer or agriculturist, may submit to Government his observations or opinions respecting any prescription in the Code and propose either its repeal, limitation, extension, or other new one instead: and if the Government see fit to inquire into it, it shall decide as may be convenient or if necessary send to the legislature proposal for reform.

Art. 316. All laws hereafter dictated in virtue hereof, as also the decrees of Government as soon as promulgated, shall have obligatory force and be considered as integral parts of this Code.

Art. 317. Without prejudice to the foregoing Article, the Government shall order every six months, or as often as convenient, that such laws, decrees and regulations be compiled and published again in a pamphlet form under the heading "Appendix to the Rural Code," and which Appendices shall go on in numerical order.

Art. 318. The Executive shall dictate the most suitable and efficacious measures to make the knowledge of this Code universal throughout the Campagna; and also make the reading of it obligatory in all schools for boys in the rural districts.

Art. 319. This code shall come into force six months after its promulgation.

EMILIO CASTRO.

Ramon de Udaeta.—Secretary.